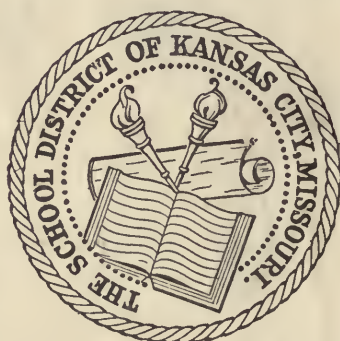


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BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II.

JULY, 1897.

NO. I.

BIRD SONG.

IT SHOULD not be overlooked by the young observer that if he would learn to recognize at once any particular bird, he should make himself acquainted with the song and call notes of every bird around him. The identification, however, of the many feathered creatures with which we meet in our rambles has heretofore required so much patience, that, though a delight to the enthusiast, few have time to acquire any great intimacy with them. To get this acquaintance with the birds, the observer has need to be prepared to explore perilous places, to climb lofty trees, and to meet with frequent mishaps. To be sure if every veritable secret of their habits is to be pried into, this pursuit will continue to be plied as patiently as it has ever been. The opportunity, however, to secure a satisfactory knowledge of bird song and bird life by a most delightful method has at last come to every one.

A gentleman who has taken a great interest in BIRDS from the appearance of the first number, but whose acquaintance with living birds is quite limited, visited one of our parks a few days ago, taking with him the latest number of the magazine. His object, he said, was to find there as many of the living forms of the speci-

mens represented as he could. "Seating myself amidst a small grove of trees, what was my delight at seeing a Red Wing alight on a telegraph wire stretching across the park. Examining the picture in BIRDS I was somewhat disappointed to find that the live specimen was not so brilliantly marked as in the picture. Presently, however, another Blackbird alighted near, who seemed to be the veritable presentment of the photograph. Then it occurred to me that I had seen the Red Wing before, without knowing its name. It kept repeating a rich, juicy note, *oncher-la-ree-e!* its tail tetering at quick intervals. A few days later I observed a large number of Red Wings near the Hyde Park water works, in the vicinity of which, among the trees and in the marshes, I also saw many other birds unknown to me. With BIRDS in my hands, I identified the Robin, who ran along the ground quite close to me, anon summoning with his beak the incautious angle worm to the surface. The Jays were noisy and numerous, and I observed many new traits in the Wood Thrush, so like the Robin that I was at first in some doubt about it. I heard very few birds sing that day, most of them being busy in search of food for their young."

THE BALD-HEADED EAGLE.

Dear Boys and Girls :

I had hoped to show you the picture of the eagle that went through the war with the soldiers. They called him "Old Abe." You will find on page 35 a long story written about him. Ask some one to read it to you.

I could not get "Old Abe," or you should now be looking at his picture. He is at present in Wisconsin, and his owner would not allow him to be taken from home.

I did the next best thing, and found one that was very much like him. They are as near alike as two children of a family. Old Abe's feathers are not quite so smooth, though. Do you wonder, after having been through the war? He is a veteran, isn't he?

The picture is that of a Bald-headed Eagle. He is known, also, by other names, such as White-headed Eagle, Bird of Washington, Sea Eagle.

You can easily see by the picture that he is not bald-headed. The name White-headed would seem a better

name. It is because at a distance his head and neck appear as though they were covered with a white skin.

He is called "Sea Eagle" because his food is mostly fish. He takes the fish that are thrown upon the shores by the waves, and sometimes he robs the Fish Hawk of his food.

This mighty bird usually places his large nest in some tall tree. He uses sticks three to five feet long, large pieces of sod, weeds, moss, and whatever he can find.

The nest is sometimes five or six feet through. Eagles use the same nest for years, adding to it each year.

Young eagles are queer looking birds. When hatched, they are covered with a soft down that looks like cotton.

Their parents feed them, and do not allow them to leave the nest until they are old enough to fly. When they are old enough, the mother bird pushes them out of the nest. She must be sure that they can fly, or she would not dare do this. Don't you think so?



THE BALD HEADED EAGLE.

THIS mighty bird of lofty flight is a native of the whole of North America, and may be seen haunting the greater portions of the sea coasts, as well as the mouths of large rivers. He is sometimes called the Whiteheaded Eagle, the American Sea Eagle, the Bird of Washington, the Washington Eagle, and the Sea Eagle. On account of the snowy white of his head and neck, the name Bald Eagle has been applied to him more generally than any other.

Sea-faring men are partial to young Eagles as pets, there being a well established superstition among them that the ship that carries the "King of Birds" can never go down. The old Romans, in selecting the Eagle as an emblem for their imperial standard, showed this superstitious belief, regarding him as the favorite messenger of Jupiter, holding communion with heaven. The Orientals, too, believed that the feathers of the Eagle's tail rendered their arrows invincible. The Indian mountain tribes east of Tennessee venerated the Eagle as their bird of war, and placed a high value on his feathers, which they used for headdresses and to decorate their pipes of peace.

The United States seems to have an abiding faith in the great bird, as our minted dollars show.

The nest of the Bald Eagle is usually placed upon the top of a giant tree, standing far up on the side of a mountain, among myriads of twining vines, or on the summit of a high inaccessible rock. The nest in the course of years, becomes of great size as the Eagle lays her eggs year after year in the same nest, and at each nesting season adds new material to the old

nest. It is strongly and comfortably built with large sticks and branches, nearly flat, and bound together with twining vines. The spacious interior is lined with hair and moss, so minutely woven together as to exclude the wind. The female lays two eggs of a brownish red color, with many dots and spots, the long end of the egg tapering to a point. The parents are affectionate, attend to their young as long as they are helpless and unfledged, and will not forsake them even though the tree on which they rest be enveloped in flames. When the Eaglets are ready to fly, however, the parents push them from the perch and trust them to the high atmospheric currents. They turn them out, so to speak, to shift for themselves.

The Bald Eagle has an accommodating appetite, eating almost anything that has ever had life. He is fond of fish, without being a great fisher, preferring to rob the Fish-hawk of the fruits of his skillful labor. Sitting upon the side of a mountain his keen vision surveys the plain or valley, and detects a sheep, a young goat, a fat turkey or rooster, a pig, a rabbit or a large bird, and almost within an eye-twinkle he descends upon his victim. A mighty grasp, a twist of his talons, and the quarry is dead long before the Eagle lays it down for a repast. The impetuosity and skill with which he pursues, overtakes and robs the Fish-hawk, and the swiftness with which the Bald Eagle darts down upon and seizes the booty, which the Hawk has been compelled to let go, is not the least wonderful part of this striking performance.

The longevity of the Eagle is very great, from 80 to 160 years.

THE SEMIPALMATED RING PLOVER.

IN THEIR habits the Plovers are usually active; they run and fly with equal facility, and though they rarely attempt to swim, are not altogether unsuccessful in that particular.

The Semipalmated Ring Plover utters a plaintive whistle, and during the nesting season can produce a few connected pleasing notes. The three or four pear-shaped, variagated eggs are deposited in a slight hollow in the ground, in which a few blades of grass are occasionally placed. Both parents assist in rearing the young. Worms, small quadrupeds, and insects constitute their food. Their flesh is regarded as a delicacy, and they are therefore objects of great attraction to the sportsman, although they often render themselves extremely troublesome by uttering their shrill cry and thus warning their feathered companions of the approach of danger. From this habit they have received the name of "tell-tales." Dr. Livingstone said of the African species: "A most plaguey sort of public spirited individual follows you everywhere, flying overhead, and is most persever-

ing in his attempts to give fair warning to all animals within hearing to flee from the approach of danger."

The American Ring Plover nests as far north as Labrador, and is common on our shores from August to October, after which it migrates southward. Some are stationary in the southern states. It is often called the Ring-Plover, and has been supposed to be identical with the European Ringed Plover.

It is one of the commonest of shore birds. It is found along the beaches and easily identified by the complete neck ring, white upon dark and dark upon light. Like the Sandpipers the Plovers dance along the shore in rhythm with the wavelets, leaving sharp half-webbed footprints on the wet sand. Though usually found along the seashore, Samuels says that on their arrival in spring, small flocks follow the courses of large rivers, like the Connecticut. He also found a single pair building on Muskeget, the famous haunt of Gulls, off the shore of Massachusetts. It has been found near Chicago, Illinois, in July.





THE RING PLOVER.

Plovers belong to a class of birds called Waders.

They spend the winters down south, and early in the spring begin their journey north. By the beginning of summer they are in the cold north, where they lay their eggs and hatch their young. Here they remain until about the month of August, when they begin to journey southward. It is on their way back that we see most of them.

While on their way north, they are in a hurry to reach their nesting places, so only stop here and there for food and rest.

Coming back with their families, we often see them in ploughed fields. Here they find insects and seeds to eat.

The Ring Plover is so called from the white ring around its neck.

These birds are not particular about their nests. They do not build comfortable nests as most birds do. They find a place that is sheltered from the north winds, and where the sun will reach them. Here they make a rude nest of the mosses lying around.

The eggs are somewhat pointed, and placed in the nest with the points toward the center. In this way the bird can more easily cover the eggs.

We find, among most birds, that after the nest is made, the mother bird thinks it her duty to hatch the young.

The father bird usually feeds her while she sits on the eggs. In some of the bird stories, you have read how the father and mother birds take turns in building the nest, sitting on the nest, and feeding the young.

Some father birds do all the work in building the nest, and take care of the birds when hatched.

Among plovers, the father bird usually hatches the young, and lets the wife do as she pleases.

After the young are hatched they help each other take care of them.

Plovers have long wings, and can fly very swiftly.

The distance between their summer and winter homes is sometimes very great.

THE MALLARD DUCK.

We should probably think this the most beautiful of ducks, were the Wood Duck not around.

His rich glossy-green head and neck, snowy white collar, and curly feathers of the tail are surely marks of beauty.

But Mr. Mallard is not so richly dressed all of the year. Like a great many other birds, he changes his clothes after the holiday season is over. When he does this, you can hardly tell him from his mate who wears a sober dress all the year.

Most birds that change their plumage wear their bright, beautiful dress during the summer. Not so with Mr. Mallard. He wears his holiday clothes during the winter. In the summer he looks much like his mate.

Usually the Mallard family

have six to ten eggs in their nest. They are of a pale greenish color—very much like the eggs of our tame ducks that we see about the barnyards.

Those who have studied birds say that our tame ducks are descendants of the Mallards.

If you were to hear the Mallard's *quack*, you could not tell it from that of the domestic duck.

The Mallard usually makes her nest of grass, and lines it with down from her breast. You will almost always find it on the ground, near the water, and well sheltered by weeds and tall grasses.

It isn't often you see a duck with so small a family. It must be that some of the ducklings are away picking up food.

Do you think they look like young chickens?



From col. Chi. Acad. Sciences.

MALLARD DUCK.
 $\frac{2}{3}$ Life size.

THE MALLARD DUCK.

THE Mallard Duck is generally distributed in North America, migrating south in winter to Panama, Cuba, and the Bahamas. In summer the full grown male resembles the female, being merely somewhat darker in color. The plumage is donned by degrees in early June, and in August the full rich winter dress is again resumed. The adult males in winter plumage vary chiefly in the extent and richness of the chestnut of the breast.

The Mallard is probably the best known of all our wild ducks, being very plentiful and remarkable on account of its size. Chiefly migrant, a few sometimes remain in the southern portion of Illinois, and a few pairs sometimes breed in the more secluded localities where they are free from disturbance. Its favorite resorts are margins of ponds and streams, pools and ditches. It is an easy walker, and can run with a good deal of speed, or dive if forced to do so, though it never dives for food. It feeds on seeds of grasses, fibrous roots of plants, worms, shell fish, and insects. In feeding in shallow water the bird keeps the hind part of its body erect, while it searches the muddy bottom with its bill. When alarmed and made to fly, it utters a loud quack, the cry of the female being the louder. "It feeds silently, but after hunger is satisfied, it amuses itself with various jabberings, swims about, moves its head backward and forward, throws water over its back, shoots along the surface, half flying, half running, and seems quite playful. If alarmed, the Mallard springs

up at once with a bound, rises obliquely to a considerable height, and flies off with great speed, the wings producing a whistling sound. The flight is made by repeated flaps, without sailing, and when in full flight its speed is hardly less than a hundred miles an hour."

Early in spring the male and female seek a nesting place, building on the ground, in marshes or among water plants, sometimes on higher ground, but never far from water. The nest is large and rudely made of sedges and coarse grasses, seldom lined with down or feathers. In rare instances it nests in trees, using the deserted nests of hawks, crows, or other large birds. Six or eight eggs of pale dull green are hatched, and the young are covered over with down. When the female leaves the nest she conceals the eggs with hay, down, or any convenient material. As soon as hatched the chicks follow the mother to the water, where she attends them devotedly, aids them in procuring food, and warns them of danger. While they are attempting to escape, she feigns lameness to attract to herself the attention of the enemy. The chicks are wonderfully active little fellows, dive quickly, and remain under water with only the bill above the surface.

On a lovely morning, before the sun has fairly indicated his returning presence, there can be no finer sight than the hurrying pinions, or inspiring note than the squawk, oft repeated, of these handsome feathered creatures, as they seek their morning meal in the lagoons and marshes.

THE AMERICAN AVOCET.

WHITE SNIFE, Yelper, Lawyer, and Scooper are some of the popular names applied in various localities to this remarkably long-legged and long and slender-necked creature, which is to be found in temperate North America, and, in winter, as far south as Cuba and Jamaica. In north-eastern Illinois the Avocet generally occurs in small parties the last of April and the first of May, and during September and the early part of October, when it frequents the borders

of marshy pools. The bird combines the characteristics of the Curlew and the Godwit, the bill being re-curved.

The cinnamon color on the head and neck of this bird varies with the individual; sometimes it is dusky gray around the eye, especially in the younger birds.

The Avocet is interesting and attractive in appearance, without having any especially notable characteristics. He comes and goes and is rarely seen by others than sportsmen.



From col. F. M. Woodruff.

AMERICAN AVOCET.
 $\frac{1}{2}$ Life size.

BIRD SONG—Continued from page 1.

Many of our singing birds may be easily identified by any one who carries in his mind the images which are presented in our remarkable pictures. See the birds at home, as it were, and hear their songs.

Those who fancy that few native birds live in our parks will be surprised to read the following list of them now visible to the eyes of so careful an observer as Mr. J. Chester Lyman.

"About the 20th of May I walked one afternoon in Lincoln Park with a friend whose early study had made him familiar with birds generally, and we noted the following varieties:

- 1 Magnolia Warbler.
- 2 Yellow Warbler.
- 3 Black Poll Warbler.
- 4 Black-Throated Blue Warbler.
- 5 Black-Throated Queen Warbler.
- 6 Blackburnian Warbler.
- 7 Chestnut-sided Warbler.
- 8 Golden-crowned Thrush.
- 9 Wilson's Thrush.
- 10 Song Thrush.
- 11 Catbird.
- 12 Bluebird.
- 13 Kingbird.
- 14 Least Fly Catcher.
- 15 Wood Pewee Fly Catcher.

- 16 Great Crested Fly Catcher.
- 17 Red-eyed Vireo.
- 18 Chimney Swallow.
- 19 Barn Swallow.
- 20 Purple Martin.
- 21 Red Start.
- 22 House Wren.
- 23 Purple Grackle.
- 24 White-throated Sparrow.
- 25 Song Sparrow.
- 26 Robin.
- 27 Blue Jay.
- 28 Red Headed Woodpecker.
- 29 Kingfisher.
- 30 Night Hawk.
- 31 Yellow-Billed Cuckoo.
- 32 Scarlet Tanager, Male and Female.
- 33 Black and White Creeper.
- 34 Gull, or Wilson's Tern.
- 35 The Omni-present English Sparrow.

"On a similar walk, one week earlier, we saw about the same number of varieties, including, however, the Yellow Breasted Chat, and the Mourning, Bay Breasted, and Blue Yellow Backed Warblers."

The sweetest songsters are easily accessible, and all may enjoy their presence.

C. C. MARBLE.

[TO BE CONTINUED.]

THE CANVAS-BACK DUCK.

WHITE-BACK, Canard Cheval, (New Orleans,) Bull-Neck, and Red Headed Bull-Neck, are common names of the famous Canvas-Back, which nests from the northern states, northward to Alaska. Its range is throughout nearly all of North America, wintering from the Chesapeake southward to Guatemala.

"The biography of this duck," says Mabel Osgood Wright, "belongs rather to the cook-book than to a bird list," even its most learned biographers referring mainly to its "eatable qualities," Dr. Coues even taking away its character in that respect when he says "there is little reason for squealing in barbaric joy over this over-rated and generally under-done bird; not one person in ten thousand can tell it from any other duck on the table, and only then under the celery circumstances," referring to the particular flavor of its flesh, when at certain seasons it feeds on vallisneria, or "water celery," which won its fame. This is really not celery at all, but an eel-grass, not always found through the range of the Canvas-Back. When this is scarce it eats frogs, lizards, tadpoles, fish, etc., so that, says Mrs. Osgood, "a certificate of residence should be sold with every pair, to insure the inspiring flavor."

The opinion held as to the edible qualities of this species varies greatly in different parts of the country. No where has it so high a reputation as in the vicinity of Chesapeake Bay, where the alleged superiority of its flesh is ascribed to the abundance of "water celery." That this notion is erroneous is evident from the fact that the same plant grows in far more abundance in the upper Mississippi Valley, where also the Canvas-Back feeds on it. Hence it is highly probable that fashion and imagination, or perhaps a superior style of cooking and serving, play a very important part in the case. In California, however, where the "water celery" does not grow, the Canvas-Back is considered a very inferior bird for the table.

It has been hunted on Chesapeake Bay and its tributaries with such inconsiderate greed that its numbers have been greatly reduced, and many have been driven to more southern waters.

In and about Baltimore, the Canvas-Back, like the famous terrapin, is in as high favor for his culinary excellence, as are the women for beauty and hospitality. To gratify the healthy appetite of the human animal this bird was doubtless sent by a kind Providence, none the less mindful of the creature comforts and necessities of mankind than of the purely aesthetic senses.



CANVASBACK DUCK.
 $\frac{1}{2}$ Life size.



THE WOOD DUCK.

A great many people think that this is the most beautiful bird of North America. It is called Wood Duck because it usually makes its nest in the hollow of a tree that overhangs the water. If it can find a squirrel's or woodpecker's hole in some stump or tree, there it is sure to nest.

A gentleman who delighted in watching the Wood Duck, tells about one that built her nest in the hollow of a tree that hung over the water. He was anxious to see how the little ones, when hatched, would get down.

In a few days he knew that the ducklings were out, for he could hear their *pee, pee, pee*. They came to the edge of the nest, one by one, and tumbled out into the water.

You know a duck can swim as soon as it comes out of the egg.

Sometimes the nest is in the hollow of a tree that is a short distance from the water.

Now how do you suppose the ducklings get there as they do ?

If the nest is not far from the ground, the mother bird lets them drop from it on the dried grass and leaves under the tree. She then carries them in her bill, one by one, to the water and back to the nest.

If the nest should be far from the ground, she carries them down one by one.

This same gentleman says that he once saw a Wood Duck carry down thirteen little ones in less than ten minutes. She took them in her bill by the back of the neck or the wing.

When they are a few days old she needs only to lead the way and the little ones will follow.

The Wood Duck is also called Summer Duck. This is because it does not stay with us during the winter, as most ducks do.

It goes south to spend the winter and comes back north early in the spring.

THE WOOD DUCK.

 UITE the most beautiful of the native Ducks, with a richness of plumage which gives it a bridal or festive appearance, this bird is specifically named *Spousa*, which means betrothed. It is also called Summer Duck, Bridal Duck, Wood Widgeon, Acorn Duck and Tree Duck.

It is a fresh water fowl, and exclusively so in the selection of its nesting haunts. It inhabits the whole of temperate North America, north to the fur countries, and is found in Cuba and sometimes in Europe. Its favorite haunts are wooded bottom-lands, where it frequents the streams and ponds, nesting in hollows of the largest trees. Sometimes a hole in a horizontal limb is chosen that seems too small to hold the Duck's plump body, and occasionally it makes use of the hole of an Owl or Woodpecker, the entrance to which has been enlarged by decay.

Wilson visited a tree containing a nest of a Wood or Summer Duck, on the banks of Tuckahoe river, New Jersey. The tree stood on a declivity twenty yards from the water, and in its hollow and broken top, about six feet down, on the soft decayed wood were thirteen eggs covered with down from the mother's breast. The eggs were of an exact oval shape, the surface smooth and fine grained, of a yellowish color resembling old polished ivory. This tree had been occupied by the same pair, during nesting time, for four successive years. The female had been seen to carry down from the

nest thirteen young, one by one, in less than ten minutes. She caught them in her bill by the wing or back of the neck, landed them safely at the foot of the tree, and finally led them to the water. If the nest be directly over the water, the little birds as soon as hatched drop into the water, breaking their fall by extending their wings.

Many stories are told of their attachment to their nesting places. For several years one observer saw a pair of Wood Ducks make their nest in the hollow of a hickory which stood on the bank, half a dozen yards from a river. In preparing to dam the river near this point, in order to supply water to a neighboring city, the course of the river was diverted, leaving the old bed an eighth of a mile behind, notwithstanding which the ducks bred in the old place, the female undaunted by the distance which she would have to travel to lead her brood to the water.

While the females are laying, and afterwards when sitting, the male usually perches on an adjoining limb and keeps watch. The common note of the drake is *peet-peet*, and when standing sentinel, if apprehending danger, he makes a noise not unlike the crowing of a young cock, *oe-eek*. The drake does not assist in sitting on the eggs, and the female is left in the lurch in the same manner as the Part-ridge.

The Wood Duck has been repeatedly tamed and partially domesticated. It feeds freely on corn meal soaked in water, and as it grows, catches flies with great dexterity.



From col. F. C. Baker.

ANHINGA OR SNAKE BIRD.
 $\frac{1}{3}$ Life size.

THE ANHINGA OR SNAKE BIRD.

THE Snake Bird is very singular indeed in appearance, and interesting as well in its habits. Tropical and sub-tropical America, north to the Carolinas and Southern Illinois, where it is a regular summer resident, are its known haunts. Here it is recognized by different names, as Water Turkey, Darter, and Snake Bird. The last mentioned seems to be the most appropriate name for it, as the shape of its head and neck at once suggest the serpent. In Florida it is called the Grecian Lady, at the mouth of the Mississippi, Water Crow, and in Louisiana, Bec a Lancette. It often swims with the body entirely under water, its head and long neck in sight like some species of water snakes, and has no doubt more than once left the impression on the mind of the superstitious sailor that he has seen a veritable sea serpent, the fear of which lead him to exaggerate the size of it.

This bird so strange in looks and action is common in summer in the South Atlantic and Gulf States, frequenting the almost impenetrable swamps, and is a constant resident of Florida.

As a diver the Snake Bird is the most wonderful of all the Ducks. Like the Loon it can disappear instantly and noiselessly, swim a long distance and reappear almost in an opposite direction to that in which naturally it would be supposed to go. And the ease with which, when alarmed, it will drop from its perch and leave scarcely a ripple on the surface of the water, would appear incredible in so large a bird, were it not a well known fact.

It has also the curious habit of sinking like a Grebe.

The nests of the Anhinga are located in various places, sometimes in low bushes at a height from the ground of only a few feet, or in the upper branches of high trees, but always over water. Though web footed, it is strong enough to grasp tightly the perch on which it nests. This gives it a great advantage over the common Duck which can nest only on the ground. Sometimes Snake Birds breed in colonies with various species of Herons. From three to five eggs, bluish, or dark greenish white, are usually found in the nest.

Prof. F. C. Baker, secretary of the Chicago Academy of Sciences, to whom we are indebted for the specimen presented here, captured this bird at Micco, Brevard Co., Florida, in April, 1889. He says he found a peculiar parasite in the brain of the Arhinga.

The Arhingias consist of but one species, which has a representative in the warmer parts of each of the great divisions of the earth. The number seen together varies from eight or ten to several hundred.

The hair-like feathers on the neck form a sort of loose mane.

When asleep the bird stands with its body almost erect. In rainy weather it often spends the greater part of the day in an erect attitude, with its neck and head stretched upward, remaining perfectly motionless, so that the water may glide off its plumage. The fluted tail is very thick and beautiful and serves as a propeller as well as a rudder in swimming.

THE AMERICAN WOODCOCK.

ISN'T this American Woodcock, or indeed any member of the family, a comical bird? His head is almost square, and what a remarkable eye he has! It is a seeing eye, too, for he does not require light to enable him to detect the food he seeks in the bogs. He has many names to characterize him, such as Bog-sucker, Mud Snipe, Blind Snipe. His greatest enemies are the pot hunters, who nevertheless have nothing but praise to bestow upon him, his flesh is so exquisitely palatable. Even those who deplore and deprecate the destruction of birds are not unappreciative of his good qualities in this respect.

The Woodcock inhabits eastern North America, the north British provinces, the Dakotas, Nebraska and Kansas, and breeds throughout the range.

Night is the time when the Woodcock enjoys life. He never flies voluntarily by day, but remains secluded in close and sheltered thickets till twilight, when he seeks his favorite feeding places. His sight is imperfect by day, but at night he readily secures his food, assisted doubtless by an extraordinary sense of smell. His remarkably large and handsome eye is too sensitive for the glare of the sun, and during the greater part of the day he remains closely concealed in marshy thickets or in rank grass. In the morning and evening twilight and on moonlight nights, he seeks his food in open places. The early riser may find him with ease, but the first glow from the rays of the morning sun will cause his disappearance from the landscape.

He must be looked for in swamps,

and in meadows with soft bottoms. During very wet seasons he seeks higher land—usually cornfields—and searches for food in the mellow plowed ground, where his presence is indicated by holes made by his bill. In seasons of excessive drought the Woodcock resorts in large numbers to tide water creeks and the banks of fresh water rivers. So averse is he to an excess of water, that after continued or very heavy rains he has been known suddenly to disappear from widely extended tracts of country.

A curious habit of the Woodcock, and one that is comparatively little known, is that of carrying its young in order to remove them from danger. So many trustworthy naturalists maintain this to be true that it must be accepted as characteristic of this interesting bird. She takes her young from place to place in her toe grasps as scarcity of food or safety may require.

As in the case of many birds whose colors adapt them to certain localities or conditions of existence, the patterns of the beautiful chestnut parts of the Woodcock mimic well the dead leaves and serve to protect the female and her young. The whistle made by their wings when flying is a manifestation of one of the intelligences of nature.

The male Woodcock, it is believed, when he gets his "intended" off entirely to himself, exhibits in peculiar dances and jigs that he is hers and hers only, or rises high on the wing cutting the most peculiar capers and gyrations in the air, protesting to her in the grass beneath the most earnest devotion, or advertising to her his whereabouts.



From col. Chl. Acad. Sciences.

AMERICAN WOODCOCK.
 $\frac{2}{3}$ Life size.

THE WOODCOCK.

Here is a bird that is not often seen in the daytime. During the day he stays in the deep woods or among the tall marsh grasses.

It is at twilight that you may see him. He then comes out in search of food.

Isn't he an odd-looking bird? His bill is made long so that he can bore into the soft ground for earthworms.

You notice his color is much like the Ruffed Grouse in June "BIRDS." This seems to be the color of a great many birds whose home is among the grasses and dried leaves. Maybe you can see a reason for this.

Those who have watched the woodcock carefully, say that he can move the tip end of the

upper part of his bill. This acts like a finger in helping him to draw his food from the ground.

What a sight it must be to see a number of these queer looking birds at work getting their food. If they happen to be in a swampy place, they often find earthworms by simply turning over the dead leaves.

If there should be, near by, a field that has been newly plowed, they will gather in numbers, at twilight, and search for worms.

The Woodcock has short wings for his size. He seems to be able to fly very fast. You can imagine how he looks while flying—his long bill out in front and his legs hanging down.

THE AMERICAN SCOTER.

THE specimen we give of the American Scoter is one of unusual rarity and beauty of plumage. It was seen off the government pier, in Chicago, in November, 1895, and has been much admired.

The Scoter has as many names as characteristics, being called the Sea Coot, the Butter-billed, and the Hollow-billed Coot. The plumage of the full grown male is entirely black, while the female is a sooty brown, becoming paler below. She is also somewhat smaller.

This Duck is sometimes found in great numbers along the entire Atlantic coast where it feeds on small shell fish which it secures by diving. A few nest in Labrador, and in winter it is found in New Jersey, on the Great Lakes, and in California. The neigh-

borhoods of marshes and ponds are its haunts, and in the Hudson Bay region the Scoter nests in June and July.

The nest is built on the ground near water. Coarse grass, feathers, and down are commonly used to make it comfortable, while it is well secreted in hollows in steep banks and cliffs. The eggs are from six to ten, of a dull buff color.

Prof. Cooke states that on May 2, 1883, fifty of these ducks were seen at Anna, Union county, Illinois, all busily engaged in picking up millet seed that had just been sown. If no mistake of identification was made in this case, the observation apparently reveals a new fact in the habits of the species, which has been supposed to feed exclusively in the water, and to subsist generally on fishes and other aquatic animal food.



From col. F. M. Woodruff.

WHITE-WINGED SCOTER.
3/4 Life size.

OLD ABE.

"I'd rather capture Old Abe," said Gen. Sterling Price, of the Confederate Army, "than a whole brigade."

"LD ABE" was the live war Eagle which accompanied the Eighth Wisconsin regiment during the War of the Rebellion. Much of a more or less problematical character has been written about him, but what we regard as authentic we shall present in this article. Old Abe was a fine specimen of the Bald Eagle, very like the one figured in this number of BIRDS. Various stories are told of his capture, but the most trustworthy account is that Chief Sky, a Chippewa Indian, took him from the nest while an Eaglelet. The nest was found on a pinetree in the Chippewa country, about three miles from the mouth of the Flambeau, near some rapids in the river. He and another Indian cut the tree down, and, amid the menaces of the parent birds, secured two young Eagles about the size of Prairie Hens. One of them died. The other, which lived to become historical, was sold to Daniel McCann for a bushel of corn. McCann carried it to Eau Claire, and presented it to a company then being organized as a part of the Eighth Wisconsin Infantry.

What more appropriate emblem than the American Bald Headed Bird could have been thus selected by the patriots who composed this regiment of freemen! The Golden Eagle (of which we shall hereafter present a splendid specimen,) with extended wings, was the ensign of the Persian monarchs, long before it was adopted by the Romans. And the Persians borrowed the symbol from the Assyrians. In fact, the symbolical use of the Eagle is of very remote antiquity. It was the insignia of Egypt, of the Etruscans, was the sacred bird of the Hindoos,

and of the Greeks, who connected him with Zeus, their supreme deity. With the Scandinavians the Eagle is the bird of wisdom. The double-headed Eagle was in use among the Byzantine emperors, "to indicate their claims to the empire of both the east and the west." It was adopted in the 14th century by the German emperors. The arms of Prussia were distinguished by the Black Eagle, and those of Poland by the White. The great Napoleon adopted it as the emblem of Imperial France.

Old Abe was called by the soldiers the "new recruit from Chippewa," and sworn into the service of the United States by encircling his neck with red, white, and blue ribbons, and by placing on his breast a rosette of colors, after which he was carried by the regiment into every engagement in which it participated, perched upon a shield in the shape of a heart. A few inches above the shield was a grooved crosspiece for the Eagle to rest upon, on either end of which were three arrows. When in line Old Abe was always carried on the left of the color bearer, in the van of the regiment. The color bearer wore a belt to which was attached a socket for the end of the staff, which was about five feet in length. Thus the Eagle was high above the bearer's head, in plain sight of the column. A ring of leather was fastened to one of the Eagle's legs to which was connected a strong hemp cord about twenty feet long.

Old Abe was the hero of about twenty-five battles, and as many skirmishes. Remarkable as it may appear, not one bearer of the flag, or of the Eagle, always shining marks for the enemy's rifles, was ever shot down.

Once or twice Old Abe suffered the loss of a few feathers, but he was never wounded.

The great bird enjoyed the excitement of carnage. In battle he flapped his wings, his eyes blazed, and with piercing screams, which arose above the noise of the conflict, seemed to urge the company on to deeds of valor.

David McLane, who was the first color bearer to carry him into battle, said:

"Old Abe, like all old soldiers, seemed to dread the sound of musketry but with the roll of artillery he appeared to be in his glory. Then he screamed, spread his wings at every discharge, and reveled in the roar and smoke of the big guns." A correspondent who watched him closely said that when a battle had fairly begun Old Abe jumped up and down on his perch with such wild and fearful screams as an eagle alone can utter. The louder the battle, the fiercer and wilder were his screams.

Old Abe varied his voice in accord with his emotions. When surprised he whistled a wild melody of a melancholy softness; when hovering over his food he gave a spiteful chuckle; when pleased to see an old friend he seemed to say: "How do you do?" with a plaintive cooing. In battle his

scream was wild and commanding, a succession of five or six notes with a startling trill that was inspiring to the soldiers. Strangers could not approach or touch him with safety, though members of the regiment who treated him with kindness were cordially recognized by him. Old Abe had his particular friends, as well as some whom he regarded as his enemies. There were men in the company whom he would not permit to approach him. He would fly at and tear them with his beak and talons. But he would never fight his bearer. He knew his own regiment from every other, would always accompany its cheer, and never that of any other regiment.

Old Abe more than once escaped, but was always lured by food to return. He never seemed disposed to depart to the blue empyrean, his ancestral home.

Having served three years, a portion of the members of Company C were mustered out, and Old Abe was presented to the state of Wisconsin. For many years, on occasions of public exercise or review, like other illustrious veterans, he excited in parade universal and enthusiastic attention.

He occupied pleasant quarters in the State Capitol at Madison, Wisconsin, until his death at an advanced age.





From col. F. M. Woodruff.

SNOWY HERON OR LITTLE EGRET.
 $\frac{1}{3}$ Life size.

CHICAGO COLORTYPE CO.

THE SNOWY HERON.

"What does it cost this garniture of death?

It costs the life which God alone can give ;

It costs dull silence where was music's breath,

It costs dead joy, that foolish pride may live.

Ah, life, and joy, and song, depend upon it,

Are costly trimmings for a woman's bonnet ! "

—MAY RILEY SMITH.

TEMPERATE and tropical America, from Long Island to Oregon, south to Buenos Ayres, may be considered the home of the Snowy Heron, though it is sometimes seen on the Atlantic coast as far as Nova Scotia. It is supposed to be an occasional summer resident as far north as Long Island, and it is found along the entire gulf coast and the shores of both oceans. It is called the Little White Egret, and is no doubt the handsomest bird of the tribe. It is pure white, with a crest composed of many long hair-like feathers, a like plume on the lower neck, and the same on the back, which are recurved when perfect.

Snowy Herons nest in colonies, preferring willow bushes in the marshes for this purpose. The nest is made in the latter part of April or early June. Along the gulf coast of Florida, they nest on the Mangrove Islands, and in the interior in the willow ponds and swamps, in company with the Louisiana and Little Blue Herons. The nest is simply a platform of sticks, and from two to five eggs are laid.

Alas, plume hunters have wrought such destruction to these lovely birds that very few are now found in the old nesting places. About 1889, according to Mr. F. M. Woodruff, this bird was almost completely exterminated in Florida, the plume hunters transferring their base of operation to the Texas coast of the Gulf, and the bird is now in a fair way to be utterly destroyed there also. He found them very rare in 1891 at Matagorda Bay,

Texas. This particular specimen is a remarkably fine one, from the fact that it has fifty-two plumes, the ordinary number being from thirty to forty.

Nothing for some time has been more commonly seen than the delicate airy plumes which stand upright in ladies' bonnets. These little feathers, says a recent writer, were provided by nature as the nuptial adornment of the White Heron. Many kind-hearted women who would not on any account do a cruel act, are, by following this fashion, causing the continuance of a great cruelty. If ladies who are seemingly so indifferent to the inhumanity practiced by those who provide them with this means of adornment would apply to the Humane Education Committee, Providence, R. I., for information on the subject, they would themselves be aroused to the necessity of doing something towards the protection of our birds. Much is, however, being done by good men and women to this end.

The Little Egret moves through the air with a noble and rapid flight. It is curious to see it pass directly overhead. The head, body and legs are held in line, stiff and immovable, and the gently waving wings carry the bird along with a rapidity that seems the effect of magic.

An old name of this bird was Hern, or Hernshaw, from which was derived the saying, "He does not know a Hawk from a Hernshaw." The last word has been corrupted into "hand-saw," rendering the proverb meaningless.

SUMMARY

Page 3.

BALD EAGLE.—*Haliaeetus leucocephalus*. Other names: "White-headed Eagle," "Bird of Washington," "Gray Eagle," "Sea Eagle." Dark brown. Head, tail, and tail coverts white. Tarsus, naked. Young with little or no white.

RANGE—North America, breeding throughout its range.

NEST—Generally in tall trees.

EGGS—Two or three, dull white.

Page 8.

SEMI-PALMATED PLOVER.—*Egialitis semi-palmata*. Other names: "American Ring Plover," "Ring Neck," "Beach Bird." Front, throat, ring around neck, and entire under parts white; band of deep black across the breast; upper parts ashy brown. Toes connected at base.

RANGE—North America in general, breeding in the Arctic and sub-arctic districts, winters from the Gulf States to Brazil.

NEST—Depression in the ground, with lining of dry grass.

EGGS—Three or four; buffy white, spotted with chocolate.

Page 11

MALLARD DUCK.—*Anas boschas*. Other names: "Green-head," "Wild Duck." Adult male, in fall, winter, and spring, beautifully colored; summer, resembles female—sombre.

RANGE—Northern parts of Northern Hemisphere.

NEST—Of grasses, on the ground, usually near the water.

EGGS—Six to ten; pale green or bluish white.

Page 15.

AMERICAN AVOCET.—*Recurvirostra americana*. Other names: "White Snipe," "Yelper," "Lawyer," "Scoopier."

RANGE—Temperate North America.

NEST—A slight depression in the ground.

EGGS—Three or four; pale olive or buffy clay color, spotted with chocolate.

Page 20.

CANVAS-BACK.—*Aythya vallisneria*. Other names: "White-back," "Bull-neck," "Red-headed Bull-neck."

RANGE—North America. Breeds only in the interior, from northwestern states to the Arctic circle; south in winter to Guatemala.

NEST—On the ground, in marshy lakesides.

EGGS—Six to ten; buffy white, with bluish tinge.

Page 21.

WOOD DUCK.—*Aix sponsa*. Coloring, varied; most beautiful of ducks. Other names: "Summer Duck," "Bridal Duck," "Wood Widgeon," "Tree Duck."

RANGE—North America. Breeds from Florida to Hudson's Bay; winters south.

NEST—Made of grasses, usually placed in a hole in tree or stump.

EGGS—Eight to fourteen; pale, buffy white.

Page 26.

SNAKE BIRD.—*Anhinga anhinga*. Other names: "Water Turkey," "Darter," "Water Crow," "Grecian Lady."

RANGE—Tropical and sub-tropical America.

NEST—Of sticks, lined with moss, rootlets, etc., in a bush or tree over the water.

EGGS—Two to four; bluish white, with a chalky deposit.

Page 30.

AMERICAN WOODCOCK.—*Philohela minor*. Other names: "Bog-sucker," "Mud Snipe," "Blind Snipe."

RANGE—Eastern North America, breeding throughout its range.

NEST—Of dried leaves, on the ground.

EGGS—Four; buffy, spotted with shades of rufous.

Page 33.

WHITE-WINGED SCOTER.—*Oidemia deglandi*. Other names: "American Velvet Scoter," "White-winged Coot," "Uncle Sam Coot."

RANGE—Northern North America; breeding in Labrador and the fur countries; south in winter.

NEST—On the ground, beneath bushes.

EGGS—Six to ten; pale, dull buff.

Page 38.

SNOWY HERON.—*Ardea candidissima*. Other names: "Little Egret," "White-crested Egret," "White Poke."

RANGE—Tropical and temperate America.

NEST—A platform of sticks, in bushes, over water.

EGGS—Three to five; pale, dull blue.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II.

AUGUST.

NO. 2.

BIRD SONG.

WE made several early morning excursions into the woods and fields during the month of June, and were abundantly rewarded in many ways—by beholding the gracious awakening of Nature in her various forms, kissed into renewed activity by the radiance of morn; by the sweet smelling air filled with the perfume of a multitude of opening flowers which had drunk again the dew of heaven; by the sight of flitting clouds across the bluest of skies, patching the green earth with moving shadows, and sweetest of all, by the twittering, calling, musical sounds of love and joy which came to the ear from the throats of the feathered throng. How pleasant to lie prone on one's back on the cool grass, and gaze upward through the shady green canopy of boughs, watching the pretty manoeuvres, the joyous greetings, the lively anxieties, the graceful movements, and even the sorrowful happenings of the bird-life above us.

Listen to the variety of their tones, as manifest as the difference of form and color. What more interesting than to observe their habits, and discover their cosy nests with their beautiful eggs in the green foliage? Strange that so many persons think only of making a collection of them, robbing the nests with heartless indifference to the suffering of the parents, to say nothing of the invasion which they

make of the undoubted rights the birds have from nature to protection and perpetuation.

Strictly speaking, there are few birds to which the word "singing" can properly be applied, the majority of them not having more than two or three notes, and they with little suggestion of music in them. Chanticleer crows, his spouse cackles or clucks, as may be suitable to the occasion. To what ear are these noises musical? They are rather language, and, in fact, the varying notes of every species of bird have a significance which can alone be interpreted by its peculiar habits. If careful note be made of the immediate conduct of the male or female bird, as the case may be, after each call or sound, the meaning of it becomes plain.

A hen whose chicks are scattered in search of food, upon seeing a hawk, utters a note of warning which we have all heard, and the young scamper to her for protection beneath her wings. When she has laid an egg, *Cut-cut-cut-cut-ot-cut!* announces it from the nest in the barn. When the chicks are hatched, her *cluck, cluck, cluck*, calls them from the nest in the wide world, and her *chick, chick, chick*, uttered quickly, selects for them the dainty which she has found, or teaches them what is proper for their diet. A good listener will detect enough intonations in her voice to constitute a considerable vocabulary, which, if imitated

[CONTINUED ON PAGE 57.]

THE AMERICAN OSPREY.

Here is the picture of a remarkable bird. We know him better by the name Fish Hawk. He looks much like the Eagle in July "BIRDS." The Osprey has no use for Mr. Eagle though.

You know the Bald Eagle or Sea Eagle is very fond of fish. Well, he is not a very good fisherman and from his lofty perch he watches for the Fish Hawk or Osprey. Do you ask why? Well, when he sees a Fish Hawk with his prey, he is sure to chase him and take it from him. It is for this reason that Ospreys dislike the Bald Eagle.

Their food is fish, which as a rule they catch alive.

It must be interesting to watch the Osprey at his fishing. He wings his way slowly over the water, keeping a watch for fish as they appear near the surface.

When he sees one that suits him, he hovers a moment, and then, closing his wings, falls upon the fish.

Sometimes he strikes it with such force that he disappears in the water for a moment. Soon we see him rise from the water with the prey in his claws.

He then flies to some tall tree and if he has not been discovered by his enemy, the Eagle, can

have a good meal for his hard work.

Look at his claws; then think of them striking a fish as they must when he plunges from on high.

A gentleman tells of an Osprey that fastened his claws in a fish that was too large for him.

The fish drew him under and nothing more was seen of Mr. Osprey. The same gentleman tells of a fish weighing six pounds that fell from the claws of a Fish Hawk that became frightened by an Eagle.

The Osprey builds his nest much like the Bald Eagle. It is usually found in a tall tree and out of reach.

Like the Eagle, he uses the same nest each year, adding to it. Sometimes it measures five feet high and three feet across. One nest that was found, contained enough sticks, cornstalks, weeds, moss, and the like, to fill a cart, and made a load for a horse to draw. Like the Crows and Blackbirds they prefer to live together in numbers. Over three hundred nests have been found in the trees on a small island.

One thing I want you to remember about the Osprey. They usually remain mated for life.



From col. F. M. Woodruff.

OSPREY.
 $\frac{1}{3}$ Life size.

THE AMERICAN OSPREY.

AN interesting bird, "Winged Fisher," as he has been happily called, is seen in places suited to his habits, throughout temperate North America, particularly about islands and along the seacoast. At Shelter Island, New York, they are exceedingly variable in the choice of a nesting place. On Gardiner's Island they all build in trees at a distance varying from ten to seventy-five feet from the ground; on Plum Island, where large numbers of them nest, many place their nests on the ground, some being built up to a height of four or five feet while others are simply a few sticks arranged in a circle, and the eggs laid on the bare sand. On Shelter Island they build on the chimneys of houses, and a pair had a nest on the cross-bar of a telegraph pole. Another pair had a nest on a large rock. These were made of coarse sticks and sea weed, anything handy, such as bones, old shoes, straw, etc. A curious nest was found some years ago on the coast of New Jersey. It contained three eggs, and securely imbedded in the loose material of the Osprey's nest was a nest of the Purple Grackle, containing five eggs, while at the bottom of the Hawk's nest was a thick, rotten limb, in which was a Tree Swallow's nest of seven eggs.

In the spring and early autumn this familiar eagle-like bird can be seen hovering over creek, river, and sound. It is recognized by its popular name of Fish-Hawk. Following a school of fish, it dashes from a considerable height to seize its prey with its stout claws. If the fish is small it is at once swallowed, if it is large, (and the Osprey will occasionally secure shad, blue fish, bass, etc., weighing five or six pounds,) the fish is carried to a

convenient bluff or tree and torn to bits. The Bald Eagle often robs him of the fish by seizing it, or startling him so that he looses his hold.

The Osprey when fishing makes one of the most breezy, spirited pictures connected with the feeding habits of any of our birds, as often there is a splashing and a struggle under water when the fish grasped is too large or the great talons of the bird gets entangled. He is sometimes carried under and drowned, and large fish have been washed ashore with these birds fastened to them by the claws.

Mrs. Mabel Osgood Wright says: "I found an Osprey's nest in a crooked oak on Wakeman's Island in late April, 1893. As I could not get close to the nest (the island is between a network of small creeks, and the flood tides covered the marshes,) I at first thought it was a monstrous crow's nest, but on returning the second week in May I saw a pair of Ospreys coming and going to and fro from the nest. I hoped the birds might return another season, as the nest looked as if it might have been used for two or three years, and was as lop-sided as a poorly made haystack. The great August storm of the same year broke the tree, and the nest fell, making quite a heap upon the ground. Among the debris were sticks of various sizes, dried reeds, two bits of bamboo fishing rod, seaweeds, some old blue mosquito netting, and some rags of fish net, also about half a bushel of salt hay in various stages of decomposition, and malodorous dirt galore."

It is well known that Ospreys, if not disturbed, will continue indefinitely to heap rubbish upon their nests till their bulk is very great. Like the Owls they can reverse the rear toe.

THE SORA RAIL.

VARIOUS are the names required to distinguish the little slate-colored Carolina Rail from its brethern, Sora, Common Rail, and, on the Potomac river, Ortolan, being among them. He is found throughout temperate North America, in the weedy swamps of the Atlantic states in great abundance, in the Middle states, and in California. In Ohio he is a common summer resident, breeding in the extensive swamps and wet meadows. The nest is a rude affair made of grass and weeds, placed on the ground in a tussock of grass in a boggy tract of land, where there is a growth of briars, etc., where he may skulk and hide in the wet grass to elude observation. The nest may often be discovered at a distance by the appearance of the surrounding grass, the blades of which are in many cases interwoven over the nest, apparently to shield the bird from the fierce rays of the sun, which are felt with redoubled force on the marshes.

The Rails feed on both vegetable and animal food. During the months of September and October, the weeds and wild oats swarm with them. They feed on the nutritious seeds, small snail shells, worms and larvae of insects, which they extract from the mud. The habits of the Sora Rail, its thin, compressed body, its aversion to take wing, and the dexterity with

which it runs or conceals itself among the grass and sedge, are exactly similar to those of the more celebrated Virginia Rail.

The Sora frequents those parts of marshes preferably where fresh water springs rise through the morass. Here it generally constructs its nest, "one of which," says an observer, "we had the good fortune to discover. It was built in the bottom of a tuft of grass in the midst of an almost impenetrable quagmire, and was composed altogether of old wet grass and rushes. The eggs had been flooded out of the nest by the extraordinary rise of the tide in a violent northwest storm, and lay scattered about the drift weed. The usual number of eggs is from six to ten. They are of a dirty white or pale cream color, sprinkled with specks of reddish and pale purple, most numerous near the great end."

When on the wing the Sora Rail flies in a straight line for a short distance with dangling legs, and suddenly drops into the water.

The Rails have many foes, and many nests are robbed of their eggs by weasels, snakes, Blackbirds, and Marsh Hawks, although the last cannot disturb them easily, as the Marsh Hawk searches for its food while flying and a majority of the Rails' nests are covered over, making it hard to distinguish them when the Hawk is above.





From col. Chi. Acad. Sciences.

SORA RAIL.
n/11 Life size.

THE SORA RAIL.

This is one of our fresh-water marsh birds. I show you his picture taken where he spends most of his time.

If it were not for the note calls, these tall reeds and grasses would keep from us the secret of the Rail's home.

Like most birds, though, they must be heard, and so late in the afternoon you may hear their clear note, ker-wee.

From all parts of the marsh you will hear their calls which they keep up long after darkness has set in.

This Rail was just about to step out from the grasses to feed when the artist took his picture. See him—head up, and tail up. He steps along carefully. He feels that it is risky to leave his shelter and is ready at the first sign of danger, to dart back under cover.

There are very few fresh-water marshes where the Rail is not found.

When a boy, I loved to hear their note calls and would spend hours on the edge of a marsh near my home.

It seemed to me there was no life among the reeds and cat-tails of the marsh, but when I threw a stone among them, the Rails would always answer with their *peeps* or *keeks*.

And so I used to go down to the marsh with my pockets filled with stones. Not that I desired or even expected to injure one of these birds. Far from it. It pleased me to hear their calls from the reeds and grass that seemed deserted.

Those of you who live near wild-rice or wild-oat marshes have a good chance to become acquainted with this Rail.

In the south these Rails are found keeping company with the Bobolinks or Reed-birds as they are called down there.

THE KENTUCKY WARBLER.

Although this bird is called the Kentucky Warbler, we must not think he visits that state alone.

We find him all over eastern North America. And a beautiful bird he is.

As his name tells you he is one of a family of Warblers.

I told you somewhere else that the Finches are the largest family of birds. Next to them come the Warblers.

Turn back now and see how many Warblers have been pictured so far.

See if you can tell what things group them as a family. Notice their bills and feet.

This bird is usually found in the dense woods, especially where there are streams of water.

He is a good singer, and his song is very different from that of any of the other Warblers.

I once watched one of these birds—olive-green above and yellow beneath. His mate was on a nest near by and he was

entertaining her with his song.

He kept it up over two hours, stopping only a few seconds between his songs. When I reached the spot with my field-glass I was attracted by his peculiar song. I don't know how long he had been singing. I stayed and spent two hours with him and he showed no signs of stopping. He may be singing yet. I hope he is.

You see him here perched on a granite cliff. I suppose his nest is near by.

He makes it of twigs and rootlets, with several thicknesses of leaves. It is neatly lined with fine rootlets and you will always find it on or near the ground.

In the September and October number of "BIRDS" you will find several Warblers and Finches. Try to keep track of them and may be you can do as many others have done—tell the names of new birds that come along by their pictures which you have seen in "BIRDS."



From col. F. M. Woodruff.

KENTUCKY WARBLER.
Life size.

THE KENTUCKY WARBLER.

BETWEEN sixty and seventy warblers are described by Davie in his "Nests and Eggs of North American Birds," and the Kentucky Warbler is recognized as one of the most beautiful of the number, in its manners almost the counterpart of the Golden Crowned Thrush (soon to delight the eyes of the readers of BIRDS), though it is altogether a more conspicuous bird, both on account of its brilliant plumage and greater activity, the males being, during the season of nesting, very pugnacious, continually chasing one another about the woods. It lives near the ground, making its artfully concealed nest among the low herbage and feeding in the undergrowth, the male singing from some old log or low bush, his song recalling that of the Cardinal, though much weaker.

The ordinary note is a soft *schip*, somewhat like the common call of the Pewee. Considering its great abundance, says an observer, the nest of this charmer is very difficult to find; the female, he thought, must slyly leave the nest at the approach of an intruder, running beneath the herbage until a considerable distance from the nest, when, joined by her mate, the pair by their evident anxiety mislead the stranger as to its location.

It has been declared that no group of birds better deserves the epithet "pretty" than the Warblers. Tanagers are splendid, Humming Birds refulgent, others brilliant, gaudy, or magnificent, but Warblers alone are pretty.

The Warblers are migratory birds, the majority of them passing rapidly across the United States in spring on the way to their northern nesting

grounds, and in autumn to their winter residence within the tropics. When the apple trees bloom they revel among the flowers, vieing in activity and numbers with the bees; "now probing the recesses of a blossom for an insect, then darting to another, where, poised daintily upon a slender twig, or suspended from it, they explore hastily but carefully for another morsel. Every movement is the personification of nervous activity, as if the time for their journey was short; as, indeed, appears to be the case, for two or three days at most suffice some species in a single locality."

We recently saw a letter from a gentleman living at Lake Geneva, in which he referred with enthusiasm to BIRDS, because it had enabled him to identify a bird which he had often seen in the apple trees among the blossoms, particularly the present season, with which he was unacquainted by name. It was the Orchard Oriole, and he was glad to have a directory of nature which would enable him to add to his knowledge and correct errors of observation. The idea is a capital one, and the beautiful Kentucky Warbler, unknown to many who see it often, may be recognized in the same way by residents of southern Indiana and Illinois, Kansas, some localities in Ohio, particularly in the southwestern portion, in parts of New York and New Jersey, in the District of Columbia, and in North Carolina. It has not heretofore been possible, even with the best painted specimens of birds in the hand, to satisfactorily identify the pretty creatures, but with BIRDS as a companion, which may readily be consulted, the student cannot be led into error.

THE RED BREASTED MERGANSER.

WHY this duck should be called red-breasted is not at first apparent, as at a distance the color can not be distinguished, but seen near, the reason is plain. It is a common bird in the United States in winter, where it is found in suitable localities in the months of May and June. It is also a resident of the far north, breeding abundantly in Newfoundland, Labrador, Greenland, and Iceland. It is liberally supplied with names, as Red-breasted Goosander or Sheldrake, Garbill, Sea Robin, etc.

There is a difference in opinion as to the nesting habits of the Red-breast, some authorities claiming that, like the Wood Duck, the nest is placed in the cavity of a tree, others that it is usually found on the ground among brushwood, surrounded with tall grasses and at a short distance from water. Davie says that most generally it is concealed by a projecting rock or other object, the nest being made of leaves and mosses, lined with feathers and down, which are plucked from the breast of the bird. The ob-

servers are all probably correct, the bird adapting itself to the situation.

Fish is the chief diet of the Merganser, for which reason its flesh is rank and unpalatable. The Bird's appetite is insatiable, devouring its food in such quantities that it has frequently to disgorge several times before it is able to rise from the water. This Duck can swallow fishes six or seven inches in length, and will attempt to swallow those of a larger size, choking in the effort.

The term Merganser is derived from the plan of the bird's bill, which is furnished with saw teeth fitting into each other.

The eggs of the Red-Breasted Merganser vary from six to twelve, are oval in shape, and are of a yellowish or reddish-drab, sometimes a dull buffy-green.

You may have seen pictures of this Duck, which frequently figures in dining rooms on the ornamental panels of stuffed game birds, but none which could cause you to remember its life-like appearance. You here see before you an actual Red-Breasted Merganser.



From col. J. G. Parker, Jr.

RED-BREADED MERGANSER.
 $\frac{3}{4}$ Life size.



with exactness, will deceive Mistress Pullet herself.

To carry the idea further, we will take the notes of some of the birds depicted in this number of BIRDS. The Osprey, or Fish-Hawk, has been carefully observed, and his only discovered note is a high, rapidly repeated whistle, very plaintive. Doubtless this noise is agreeable and intelligible to his mate, but cannot be called a song, and has no significance to the listener.

The Vulture utters a low, hissing sound when disturbed. This is its only note. Not so with the Bald Eagle, whose scream emulates the rage of the tempest, and implies courage, the quality which associates him with patriotism and freedom. In the notes of the Partridge there is a meaning recognizable by every one. After the nesting season, when the birds are in bevvies, their notes are changed to what sportsmen term "scatter calls." Not long after a bevy has been flushed, and perhaps widely scattered, the members of the disunited family may be heard signaling to one another in sweet minor calls of two and three notes, and in excitement, they utter low, twittering notes.

Of the Sora Rails, Mr. Chapman says, "knowing their calls, you have only to pass a May or June evening near a marsh to learn whether they inhabit it. If there, they will greet you late in the afternoon with a clear whistled *ker-woe*, which soon comes from dozens of invisible birds about you, and long after night has fallen, it continues like a springtime chorus of piping hylas. Now and again it is interrupted by a high-voiced, rolling whinney, which, like a call of alarm, is taken up and repeated by different birds all over the marsh."

Poor Red-breasted Merganser! He has only one note, a croak. Perhaps

it was of him that Bryant was thinking when he wrote the stanzas "To a Water-Fowl."

"The sentiment of feeling awakened by any of the aquatic fowls is pre-eminently one of loneliness," says John Burroughs. "The Wood Duck (see July BIRDS) which you approach, starts from the pond or the marsh, the Loon neighing down out of the April sky, the Wild Goose, the Curlew, the Stork, the Bittern, the Sandpiper, etc., awaken quite a different train of emotions from those awakened by the land birds. They all have clinging to them some reminiscence and suggestion of the sea. Their cries echo its wildness and desolation; their wings are the shape of its billows."

But the Evening Grosbeak, the Kentucky Warbler, the Skylark, land birds all, are singers. They have music in their throats and in their souls, though of varying quality. The Grosbeak's note is described by different observers as a shrill *cheepy tee* and a frog-like *peep*, while one writer remarks that the malés have a single metallic cry like the note of a trumpet, and the females a loud chattering like the large Cherry Birds.

The Kentucky Warbler's song is entirely unlike that of any other Warbler, and is a loud, clearly whistled performance of five, six, or seven notes, *turdle, turdle, turdle*, resembling in tone some of the calls of the Carolina Wren. He is so persistent in his singing, however, that the Red-Breasted Merganser's simple croak would sometimes be preferable to it.

But the Skylark—

"All the earth and air
With thy voice is loud,
As, when night is bare
From one lonely cloud

The moon rains out her beams and heaven is
over-flowed."

—C. C. MARBLE.

THE YELLOW LEGS.

YELLOW LEGS, or Lesser. Tell tale sometimes called Yellow-leg Snipe, and Little Cucu, inhabits the whole of North America, nesting in the cold temperate and subarctic districts of the northern continent, migrating south in winter to Argentine and Chili. It is much rarer in the western than eastern province of North America, and is only accidental in Europe. It is one of the wading birds, its food consisting of larvae of insects, small shell fish and the like.

The nest of the Lesser Yellow Shanks, which it is sometimes called, is a mere depression in the ground, without any lining. Sometimes, however, it is placed at the foot of a bush, with a scanty lining of withered leaves. Four eggs of light drab, buffy or cream color, sometimes of light brown, are

laid, and the breast of the female is found to be bare of feathers when engaged in rearing the young. The Lesser Yellow legs breeds in central Ohio and Illinois, where it is a regular summer resident, arriving about the middle of April, the larger portion of flocks passing north early in May and returning about the first of September to remain until the last of October.

A nest of this species of Snipe was found situated in a slight depression at the base of a small hillock near the border of a prairie slough near Evanston, Illinois, and was made of grass stems and blades. The color of the eggs in this instance was a deep grayish white, three of which were marked with spots of dark brown, and the fourth egg with spots and well defined blotches of a considerably lighter shade of the same.



YELLOW LEGS.
 $\frac{1}{2}$ Life size.



From col. F. M. Woodruff.

SKY LARK.
¾ Life size.

THE SKYLARK.

This is not an American bird. I have allowed his picture to be taken and placed here because so many of our English friends desired it.

The skylark is probably the most noted of birds in Europe. He is found in all of the countries of Europe, but England seems to claim it. Here it stays during the summer, and goes south in the winter.

Like our own Meadow Lark, he likes best to stay in the fields. Here you will find it when not on the wing.

Early in the spring the Skylark begins his song, and he may be heard for most of the year.

Sometimes he sings while on the ground, but usually it is while he is soaring far above us.

Skylarks do not often seek the company of persons. There are some birds, you know, that seem happy only when they are near people. Of course, they are somewhat shy, but as a rule they prefer to be near people. While the Skylark does not seek to be near persons, yet it is not afraid of them.

A gentleman, while riding through the country, was surprised to see a Skylark perch on his saddle. When he tried to touch it, the Lark moved along on the horse's back, and finally

dropped under the horse's feet. Here it seemed to hide. The rider, looking up, saw a hawk flying about. This explained the cause of the skylark's strange actions.

A pair of these Larks had built their nest in a meadow. When the time came for mowing the grass, the little ones were not large enough to leave the nest. The mother bird laid herself flat on the ground, with her wings spread out. The father bird took one of the little ones from the nest and placed it on the mother's back. She flew away, took the baby bird to a safe place, and came back for another.

This time the father took his turn. In this way they carried the little ones to a safe place before the mowers came.

Like our Meadow Lark, the Skylark builds her nest on the ground—never in bushes or trees. Usually it is built in a hole below the surface of the ground. It is for this reason that it is hard to find.

Then, too, the color of the nest is much like that of the ground.

Four or five eggs are usually laid, and in two weeks the little larks crack the shells, and come into the world crying for worms and bugs.

THE SKYLARK.

THE English Skylark has been more celebrated in poetry than any other song-bird. Shelley's famous poem is too long to quote and too symmetrical to present in fragmentary form. It is almost as musical as the sweet singer itself.

'By the first streak of dawn,' says one familiar with the Skylark, "he bounds from the dripping herbage, and on fluttering wings mounts the air for a few feet ere giving forth his cheery notes. Then upward, apparently without effort he sails, sometimes drifting far away as he ascends, borne as it were by the ascending vapors, so easily he mounts the air. His notes are so pure and sweet, and yet so loud and varied withal, that when they first disturb the air of early morning all the other little feathered tenants of the fields and hedgerows seem irresistibly compelled to join him in filling the air with melody. Upwards, ever upwards, he mounts, until like a speck in the highest ether he appears motionless; yet still his notes are heard, lovely in their faintness, now gradually growing louder and louder as he descends, until within a few yards of the earth they cease, and he drops like a fragment hurled from above into the herbage, or flits about it for a short distance ere alighting." The Lark sings just as richly on the ground as when on quivering wing. When in song he is said to be a good guide to the weather, for whenever we see him rise into the air, despite the gloomy looks of an overcast sky, fine weather is invariably at hand.

The nest is most frequently in the grass fields, sometimes amongst the young corn, or in places little frequented. It is made of dry grass and moss, and lined with fibrous roots and a little horse hair. The eggs, usually four or five in number, are dull white, spotted, clouded, and blotched over the entire surface with brownish green. The female Lark, says Dixon, like all ground birds, is a very close sitter,

remaining faithful to her charge. She regains her nest by dropping to the ground a hundred yards or more from its concealment.

The food of the Lark is varied,—in spring and summer, insects and their larvae, and worms and slugs, in autumn and winter, seeds.

Olive Thorne Miller tells this pretty anecdote of a Skylark which she emancipated from a bird store: "I bought the skylark, though I did not want him. I spared no pains to make the stranger happy. I procured a beautiful sod of uncut fresh grass, of which he at once took possession, crouching or sitting low among the stems, and looking most bewitching. He seemed contented, and uttered no more that appealing cry, but he did not show much intelligence. His cage had a broad base behind which he delighted to hide, and for hours as I sat in the room I could see nothing of him, although I would hear him stirring about. If I rose from my seat he was instantly on the alert, and stretched his head up to look over at me. I tried to get a better view of him by hanging a small mirror at an angle over his cage, but he was so much frightened by it that I removed it." "This bird," Mrs. Miller says "never seemed to know enough to go home. Even when very hungry he would stand before his wide open door, where one step would take him into his beloved grass thicket, and yet that one step he would not take. When his hunger became intolerable he ran around the room, circled about his cage, looking in, recognizing his food dishes, and trying eagerly to get between the wires to reach them; and yet when he came before the open door he would stand and gaze, but never go in. After five months' trial, during which he displayed no particular intelligence, and never learned to enter his cage, he passed out of the bird room, but not into a store."



From col. F. M. Woodruff.

WILSONS PHALAROPE.
 $\frac{3}{4}$ Life size.

WILSON'S PHALAROPE.

PERHAPS the most interesting, as it is certainly the most uncommon, characteristic of this species of birds is that the male relieves his mate from all domestic duties except the laying of the eggs. He usually chooses a thin tuft of grass on a level spot, but often in an open place concealed by only a few straggling blades. He scratches a shallow depression in the soft earth, lines it with a thin layer of fragments of old grass blades, upon which the eggs, three or four, are laid about the last of May or first of June. Owing to the low situation in which the nest is placed, the first set of eggs are often destroyed by a heavy fall of rain causing the water to rise so as to submerge the nest. The instinct of self preservation in these birds, as in many others, seems lacking in this respect. A second set, numbering two or three, is often deposited in a depression scratched in the ground, as at first, but with no sign of any lining.

Wilson's Phalarope is exclusively an American bird, more common in

the interior than along the sea coast. The older ornithologists knew little of it. It is now known to breed in northern Illinois, Iowa, Wisconsin, Minnesota, the Dakotas, Utah, and Oregon. It is recorded as a summer resident in northern Indiana and in western Kansas. Mr. E. W. Nelson states that it is the most common species in northern Illinois, frequenting grassy marshes and low prairies, and is not exceeded in numbers even by the ever-present Spotted Sandpiper. While it was one of our most common birds in the Calumet region it is now becoming scarce.

The adult female of this beautiful species is by far the handsomest of the small waders. The breeding plumage is much brighter and richer than that of the male, another peculiar characteristic, and the male alone possesses the naked abdomen. The female always remains near the nest while he is sitting, and shows great solicitude upon the approach of an intruder. The adults assume the winter plumage during July.

THE EVENING GROSBEAK.

HANDSOMER birds there may be, but in the opinion of many this visitant to various portions of western North America is in shape, color, and markings one of the most exquisite of the feather-wearers. It has for its habitation the region extending from the plains to the Pacific ocean and from Mexico into British America. Toward the North it ranges further to the east; so that, while it appears to be not uncommon about Lake Superior, it has been reported as occurring in Ohio, New York, and Canada. In Illinois it was observed at Freeport during the winter of 1870 and 1871, and at Waukegan during January, 1873. It is a common resident of the forests of the State of Washington, and also of Oregon. In the latter region Dr. Merrill observed the birds carrying building material to a huge fir tree, but was unable to locate the nest, and the tree was practically inaccessible. Mr. Walter E. Bryant was the first to record an authentic nest and eggs of the Evening Grosbeak. In a paper read before the California Academy of Sciences he describes a nest of this species containing four eggs, found in Yolo county, California. The nest was built in a small live oak, at a height of ten feet, and was composed of small twigs supporting a thin layer of fibrous bark and a lining of horse hair. The eggs are of a clear greenish-ground color, blotched with pale brown. According to Mr. Davie, one of the leading authorities on North American birds, little if any more information has been obtained regarding the nests and eggs of the Evening Grosbeak.

As to its habits, Mr. O. P. Day says, that about the year 1872, while hunting during fine autumn weather in the woods about Eureka, Illinois, he fell in with a number of these Grosbeaks.

They were feeding in the tree tops on the seeds of the sugar maple, just then ripening, and were excessively fat. They were very unsuspicious, and for a long time suffered him to observe them. They also ate the buds of the cottonwood tree in company with the Rose-Breasted Grosbeak.

The song of the Grosbeak is singularly like that of the Robin, and to one not thoroughly familiar with the notes of the latter a difference would not at first be detected. There is a very decided difference, however, and by repeatedly listening to both species in full voice it will be discovered more and more clearly. The sweet and gentle strains of music harmonize delightfully, and the concert they make is well worth the careful attention of the discriminating student. The value of such study will be admitted by all who know how little is known of the songsters. A gentleman recently said to us that one day in November the greater part of the football field at the south end of Lincoln Park was covered with Snow Birds. There were also on the field more than one hundred grammar and high school boys waiting the arrival of the football team. There was only one person present who paid any attention to the birds which were picking up the food, twittering, hopping, and flying about, and occasionally indulging in fights, and all utterly oblivious of the fact that there were scores of shouting school boys around and about them. The gentleman called the attention of one after another of ten of the high school boys to the snow birds and asked what they were. They one and all declared they were English Sparrows, and seemed astounded that any one could be so ignorant as not to know what an English Sparrow was. So much for the city-bred boy's observation of birds.



From col. F. M. Woodruff.

EVENING GROSBEEK.
 $\frac{1}{4}$ Life size.

THE EVENING GROSBEAK.

In the far Northwest we find this beautiful bird the year around. During the winter he often comes farther south in company with his cousin, the Rose-breasted Grosbeak.

What a beautiful sight it must be to see a flock of these birds—Evening Grosbeaks and Rose-breasted in their pretty plumage.

Grosbeaks belong to a family called Finches. The Sparrows, Buntings, and Crossbills belong to the same family. It is the largest family among birds.

You will notice that they all have stout bills. Their food is mostly grains and their bills are well formed to crush the seeds.

Look at your back numbers of "BIRDS" and notice the pictures of the other Finches I have named. Don't you think Dame Nature is very generous with her colors sometimes?

Only a few days ago while strolling through the woods with my field glass, I saw a pretty sight. On one tree I saw a Red-headed Woodpecker, a Flicker, an Indigo Bunting, and a Rose-breasted Grosbeak. I thought then, if we could only have the Evening Grosbeak our group of colors would be complete.

Have you ever wondered at some birds being so prettily dressed while others have such dull colors?

Some people say that the birds who do not sing must have bright feathers to make them attractive. We cannot believe this. Some of our bright colored birds are sweet singers, and surely many of our dull colored birds cannot sing very well.

Next month you will see the pictures of several home birds. See if dull colors have anything to do with sweet song.

THE TURKEY VULTURE.

This bird is found mostly in the southern states. Here he is known by the more common name of Turkey Buzzard.

He looks like a noble bird but he isn't. While he is well fitted for flying, and might, if he tried, catch his prey, he prefers to eat dead animals.

The people down south never think of burying a dead horse or cow. They just drag it out away from their homes and leave it to the Vultures who are sure to dispose of it.

It is very seldom that they attack a live animal.

They will even visit the streets of the cities in search of dead animals for food, and do not show much fear of man. Oftentimes they are found among the chickens and ducks in the barnyard, but have never been known to kill any.

One gentleman who has studied the habits of the Vulture says that it has been known to

suck the eggs of Herons. This is not common, though. As I said they prefer dead animals for their food and even eat their own dead.

The Vulture is very graceful while on the wing. He sails along and you can hardly see his wings move as he circles about looking for food on the ground below.

Many people think the Vulture looks much like our tame turkey.

If you know of a turkey near by, just compare this picture with it and you won't think so.

See how chalk-white his bill is. No feathers on his head, but a bright red skin.

What do think of the young chick? It doesn't seem as though he could ever be the large, heavy bird his parent seems to be.

Now turn back to the first page of July "BIRDS" and see how he differs from the Eagle.



From col. F. M. Woodruff.

TURKEY VULTURE.
 $\frac{1}{4}$ Life size.

THE TURKEY VULTURE.

TURKEY BUZZARD is the familiar name applied to this bird, on account of his remarkable resemblance to our common Turkey. This is the only respect however, in which they are alike. It inhabits the United States and British Provinces from the Atlantic to the Pacific, south through Central and most of South America. Every farmer knows it to be an industrious scavenger, devouring at all times the putrid or decomposing flesh of carcasses. They are found in flocks, not only flying and feeding in company, but resorting to the same spot to roost; nesting also in communities; depositing their eggs on the ground, on rocks, or in hollow logs and stumps, usually in thick woods or in a sycamore grove, in the bend or fork of a stream. The nest is frequently built in a tree, or in the cavity of a sycamore stump, though a favorite place for depositing the eggs is a little depression under a small bush or overhanging rock on a steep hillside.

Renowned naturalists have long argued that the Vulture does not have an extraordinary power of smell, but, according to Mr. Davie, an excellent authority, it has been proven by the most satisfactory experiments that the Turkey Buzzard does possess a keen sense of smell by which it can distinguish the odor of flesh at a great distance.

The flight of the Turkey Vulture is truly beautiful, and no landscape with its patches of green woods and grassy fields, is perfect without its dignified figure high in the air, moving round in circles, steady, graceful and easy, and apparently without effort. "It sails," says Dr. Brewer, "with a steady, even motion, with wings just above the horizontal position, with their tips

slightly raised, rises from the ground with a single bound, gives a few flaps of the wings, and then proceeds with its peculiar soaring flight, rising very high in the air."

The Vulture pictured in the accompanying plate was obtained between the Brazos river and Matagorda bay. With it was found the Black Vulture, both nesting upon the ground. As the nearest trees were thirty or forty miles distant these Vultures were always found in this situation. The birds selected an open spot beneath a heavy growth of bushes, placing the eggs upon the bare ground. The old bird when approached would not attempt to leave the nest, and in the case of the young bird in the plate, the female to protect it from harm, promptly disgorged the putrid contents of her stomach, which was so offensive that the intruder had to close his nostrils with one hand while he reached for the young bird with the other.

The Turkey Vulture is a very silent bird, only uttering a hiss of defiance or warning to its neighbors when feeding, or a low guttural croak of alarm when flying low overhead.

The services of the Vultures as scavengers in removing offal render them valuable, and almost a necessity in southern cities. If an animal is killed and left exposed to view, the bird is sure to find out the spot in a very short time, and to make its appearance as if called by some magic spell from the empty air.

"Never stoops the soaring Vulture
On his quarry in the desert,
On the sick or wounded bison,
But another Vulture, watching,
From his high aerial lookout,
Sees the downward plunge and follows;
And a third pursues the second,
Coming from the invisible ether,
First a speck, and then a Vulture,
Till the air is dark with pinions."

TO A WATER FOWL.

Whither, 'midst falling dew

While glow the heavens with the last steps of day,
Far through their rosy depths dost thou pursue
Thy solitary way?

Vainly the fowler's eye

Might mark thy distant flight to do thee wrong,
As, darkly painted on the crimson sky,
Thy figure floats along.

Seek'st thou the plashy brink

Of weedy lake, or marge of river wide,
Or where the rocky billows rise and sink
On the chafed ocean side.

There is a Power whose care

Teaches thy way along that pathless coast—
The desert and illimitable air—
Lone wandering, but not lost.

All day thy wings have fanned,

At that far height, the cold thin atmosphere,
Yet stoop not, weary, to the welcome land
Though the dark night is near.

And soon that toil shall end;

Soon shalt thou find a summer home, and nest,
And scream among thy fellows; reeds shall bend,
Soon o'er thy sheltered nest.

Thou'rt gone, the abyss of heaven

Hath swallowed up thy form; yet on my heart
Deeply has sunk the lesson thou hast given,
And shall not soon depart.

He who, from zone to zone,

Guides through the boundless sky thy certain flight,
In the long way that I must tread alone,
Will lead my steps aright.

WILLIAM CULLEN BRYANT.





From col. F. M. Woodruff.

GAMBEL'S PARTRIDGE.
 $\frac{1}{2}$ Life size.

CHICAGO COLORTYPE CO.

GAMBEL'S PARTRIDGE.

GAMBEL'S PARTRIDGE, of which comparatively little is known, is a characteristic game bird of Arizona and New Mexico, of rare beauty, and with habits similar to others of the species of which there about two hundred. Mr. W. E. D. Scott found the species distributed throughout the entire Catalina region in Arizona below an altitude of 5,000 feet. The bird is also known as the Arizona Quail.

The nest is made in a depression in the ground sometimes without any lining. From eight to sixteen eggs are laid. They are most beautifully marked on a creamy-white ground with scattered spots and blotches of old gold, and sometimes light drab and chestnut red. In some specimens the gold coloring is so pronounced that it strongly suggests to the imagination that this quail feeds upon the grains of the precious metal which characterizes its home, and that the pigment is imparted to the eggs.

After the nesting season these birds commonly gather in "coveys" or bebies,

usually composed of the members of but one family. As a rule they are terrestrial, but may take to trees when flushed. They are game birds *par excellence*, and, says Chapman, trusting to the concealment afforded by their dull colors, attempt to avoid detection by hiding rather than by flying. The flight is rapid and accompanied by a startling whirr, caused by the quick strokes of their small, concave, stiff-feathered wings. They roost on the ground, tail to tail, with heads pointing outward; "a bunch of closely huddled forms—a living bomb whose explosion is scarcely less startling than that of dynamite manufacture."

The Partridge is on all hands admitted to be wholly harmless, and at times beneficial to the agriculturist. It is an undoubted fact that it thrives with the highest system of cultivation, and the lands that are the most carefully tilled, and bear the greatest quantity of grain and green crops, generally produce the greatest number of Partridges.

SUMMARY.

Page 43.

AMERICAN OSPREY.—*Pandion paliaetus carolinensis*.

RANGE—North America; breeds from Florida to Labrador; winters from South Carolina to northern South America.

NEST—Generally in a tree, thirty to fifty feet from the ground, rarely on the ground.

EGGS—Two to four; generally buffy white, heavily marked with chocolate.

Page 48.

SORA RAIL.—*Porzana carolina*.

RANGE—Temperate North America, south to the West Indies and northern South America.

NEST—Of grass and reeds, placed on the ground in a tussock of grass, where there is a growth of briers.

EGGS—From seven to fourteen; of a ground color, of dark cream or drab, with reddish brown spots.

Page 51.

KENTUCKY WARBLER.—*Geothlypis formosa*.

RANGE—Eastern United States; breeds from the Gulf States to Iowa and Connecticut; winters in Central America.

NEST—Bulky, of twigs and rootlets, firmly wrapped with leaves, on or near the ground.

EGGS—Four or five; white or grayish white, speckled or blotched with rufous.

Page 55.

RED-BREASTED MERGANSER.—*Mergus serrator*.

RANGE—Northern parts of the Northern Hemisphere; in America breeds from northern Illinois and New Brunswick northward to the arctic regions; winters southward to Cuba.

NEST—Of leaves, grasses, mosses, etc., lined with down, on the ground near water, among rocks or scrubby bushes.

EGGS—Six to twelve; creamy buff.

Page 60.

YELLOW-LEGS.—*Totanus flavipes*.

RANGE—North America, breeding chiefly in the interior from Minnesota, northern Illinois, Ontario County, N. Y., northward to the Arctic regions; winters from the Gulf States to Patagonia.

EGGS—Three or four; buffy, spotted or blotched with dark madder—or van dyke—brown and purplish gray.

Page 61.

SKYLARK.—*Alda arvensis*.

RANGE—Europe and portions of Asia and Africa; accidental in the Bermudas and in Greenland.

NEST—Placed on the ground, in meadows or open grassy places, sheltered by a tuft of grass; the materials are grasses, plant stems, and a few chance leaves.

EGGS—Three to five, of varying form, color, and size.

Page 66.

WILSON'S PHALAROPE.—*Phalaropus tricolor*.

RANGE—Temperate North America, breeding from northern Illinois and Utah northward to the Saskatchewan region; south in winter to Brazil and Patagonia.

NEST—A shallow depression in soft earth, lined with a thin layer of fragments of grass.

EGGS—Three to four; cream buff or buffy white, heavily blotched with deep chocolate.

Page 70.

EVENING GROSBEAK.—*Coccythraustes vespertina*.

RANGE—Interior of North America, from Manitoba northward; southeastward in winter to the upper Mississippi Valley and casually to the northern Atlantic States.

NEST—Of small twigs, lined with bark, hair, or rootlets, placed within twenty feet of the ground.

EGGS—Three or four; greenish, blotched with pale brown.

Page 73.

TURKEY VULTURE.—*Catharista atrata*.

RANGE—Temperate America, from New Jersey southward to Patagonia.

NEST—In hollow stump or log, or on ground beneath bushes or palmettos.

EGGS—One to three; dull white, spotted and blotched with chocolate marking.

Page 78.

GAMBEL'S PARTRIDGE.—*Callipepla gambeli*.

RANGE—Northwestern Mexico, Arizona, New Mexico, southern Utah, and western Utah and western Texas.

NEST—Placed on the ground, sometimes without any lining.

EGGS—From eight to sixteen.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II.

SEPTEMBER.

No. 3.

BIRD SONG.

How songs are made
Is a mystery,
Which studied for years
Still baffles me.

—R. H. STODDARD.

SOME birds are poets and sing all summer," says Thoreau. "They are the true singers. Any man can write verses in the love season. We are most interested in those birds that sing for the love of music, and not of their mates; who meditate their strains and amuse themselves with singing; the birds whose strains are of deeper sentiment."

Thoreau does not mention by name any of the poet-birds to which he alludes, but we think our selections for the present month include some of them. The most beautiful specimen of all, which is as rich in color and "sun-sparkle" as the most polished gem to which he owes his name, the Ruby-throated Humming-bird, cannot sing at all, uttering only a shrill mouse-like squeak. The humming sound made by his wings is far more agreeable than his voice, for "when the mild gold stars flower out" it announces his presence. Then

"A dim shape quivers about
Some sweet rich heart of a rose."

He hovers over all the flowers that possess the peculiar sweetness that he loves—the blossoms of the honey-suckle, the red, the white, and the yellow roses, and the morning glory. The red clover is as sweet to him as to the honey bee, and a pair of them may often be seen hovering over the blossoms for a moment, and then disappearing with the quickness of a

flash of light, soon to return to the same spot and repeat the performance. *Squeak, squeak!* is probably their call note.

Something of the poet is the Yellow Warbler, though his song is not quite as long as an epic. He repeats it a little too often, perhaps, but there is such a pervading cheerfulness about it that we will not quarrel with the author. *Sweet-sweet-sweet-sweet-sweet-sweeter-sweeter!* is his frequent contribution to the volume of nature, and all the while he is darting about the trees, "carrying sun-glints on his back wherever he goes." His song is appropriate to every season, but it is in the spring, when we hear it first, that it is doubly welcome to the ear. The grateful heart asks with Bourdillon:

"What tidings hath the Warbler heard
That bids him leave the lands of summer
For woods and fields where April yields
Bleak welcome to the blithe newcomer?"

The Mourning Dove may be called the poet of melancholy, for its song is, to us, without one element of cheerfulness. Hopeless despair is in every note, and, as the bird undoubtedly does have cheerful moods, as indicated by its actions, its song must be appreciated only by its mate. *Coo-o, coo-o!* suddenly thrown upon the air and resounding near and far is something hardly to be extolled, we should think, and yet the beautiful and graceful Dove possesses so many pretty ways that every one is attracted to it, and the tender affection of the mated pair

is so manifest, and their constancy so conspicuous, that the name has become a symbol of domestic concord.

The Cuckoo must utter his note in order to be recognized, for few that are learned in bird lore can discriminate him save from his notes. He proclaims himself by calling forth his own name, so that it is impossible to make a mistake about him. Well, his note is an agreeable one and has made him famous. As he loses his song in the summer months, he is inclined to make good use of it when he finds it again. English boys are so skillful in imitating the Cuckoo's song, which they do to an exasperating extent, that the bird himself may often wish for that of the Nightingale, which is inimitable.

But the Cuckoo's song, monotonous as it is, is decidedly to be preferred to that of the female House Wren, with its *Chit-chit-chit-chit*, when suspicious or in anger. The male, however, is a real poet, let us say—and sings a merry roulade, sudden, abruptly ended, and frequently repeated. He sings, apparently, for the love of music, and is as merry and gay when his mate is absent as when she is at his side, proving that his singing is not solely for her benefit.

So good an authority as Dr. Cones vouches for the exquisite vocalization of the Ruby-crowned Kinglet. Have you ever heard a wire vibrating? Such is the call note of the Ruby, thin and metallic. But his song has a fullness, a variety, and a melody, which, being often heard in the spring migration, make this feathered beauty additionally attractive. Many of the fine songsters are not brilliantly attired, but this fellow has a combination of attractions to commend him as worthy of the bird student's careful attention.

Of the Hermit Thrush, whose song is celebrated, we will say only, "Read everything you can find about him." He will not be discovered easily, for

even Olive Thorne Miller, who is presumed to know all about birds, tells of her pursuit of the Hermit in northern New York, where it was said to be abundant, and finding, when she looked for him, that he had always "been there" and was gone. But one day in August she saw the bird and heard the song and exclaimed: "This only was lacking—this crowns my summer."

The Song Sparrow can sing too, and the Phoebe, beloved of man, and the White-breasted Nuthatch, a little. They do not require the long-seeking of the Hermit Thrush, whose very name implies that he prefers to flock by himself, but can be seen in our parks throughout the season. But the Sparrow loves the companionship of man, and has often been a solace to him. It is stated by the biographer of Kant, the great metaphysician, that at the age of eighty he had become indifferent to much that was passing around him in which he had formerly taken great interest. The flowers showed their beautiful hues to him in vain; his weary vision gave little heed to their loveliness; their perfume came unheeded to the sense which before had inhaled it with eagerness. The coming on of spring, which he had been accustomed to hail with delight, now gave him no joy save that it brought back a little Sparrow, which came annually and made its home in a tree that stood by his window. Year after year, as one generation went the way of all the earth, another would return to its birth-place to reward the tender care of their benefactor by singing to him their pleasant songs. And he longed for their return in the spring with "an eagerness and intensity of expectation."

How many provisions nature has for keeping us simple-hearted and child-like! The Song Sparrow is one of them.

—C. C. MARBLE.



From col. F. M. Woodruff.

SUMMER YELLOW-BIRD.
3/5 Life-size.

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THE YELLOW WARBLER.

IN a recent article Angus Gaines describes so delightfully some of the characteristics of the Yellow Warbler, or Summer Yellow bird, sometimes called the Wild Canary, that we are tempted to make use of part of it. "Back and forth across the garden the little yellow birds were flitting, dodging through currant and gooseberry bushes, hiding in the lilacs, swaying for an instant on swinging sprays of grape vines, and then flashing out across the garden beds like yellow sunbeams. They were lithe, slender, dainty little creatures, and were so quick in their movements that I could not recognize them at first, but when one of them hopped down before me, lifted a fallen leaf and dragged a cut-worm from beneath it, and, turning his head, gave me a sidewise glance with his victim still struggling in his beak, I knew him. His gay coat was yellow without the black cap, wings, and tail which show in such marked contrast to the bright canary hue of that other yellow bird, the Gold-finch.

"Small and delicate as these birds are, they had been on a long journey to the southward to spend the winter, and now on the first of May, they had returned to their old home to find the land at its fairest—all blossoms, buds, balmy air, sunshine, and melody. As they flitted about in their restless way, they sang the soft, low, warbling trills, which gave them their name of Yellow Warbler."

Mrs. Wright says these beautiful birds come like whirling leaves, half

autumn yellow, half green of spring, the colors blending as in the outer petals of grass-grown daffodils. "Lovable, cheerful little spirits, darting about the trees, exclaiming at each morsel that they glean. Carrying sun glints on their backs wherever they go, they should make the gloomiest misanthrope feel the season's charm. They are so sociable and confiding, feeling as much at home in the trees by the house as in seclusion."

The Yellow-bird builds in bushes, and the nest is a wonderful example of bird architecture. Milkweed, lint and its strips of fine bark are glued to twigs, and form the exterior of the nest. Its inner lining is made of the silky down on dandelion-balls woven together with horse-hair. In this dainty nest are laid four or five creamy white eggs, speckled with lilac tints and red-browns. The unwelcome egg of the Cow-bird is often found in the Yellow-bird's nest, but this Warbler builds a floor over the egg, repeating the expedient, if the Cow-bird continues her mischief, until sometimes a third story is erected.

A pair of Summer Yellow-birds, we are told, had built their nest in a wild rose bush, and were rearing their family in a wilderness of fragrant blossoms whose tinted petals dropped upon the dainty nest, or settled upon the back of the brooding mother. The birds, however, did not stay "to have their pictures taken," but their nest may be seen among the roses.

The Yellow Warbler's song is *Sweet-sweet-sweet-sweet-sweet-sweet-sweet-sweet-sweet*: seven times repeated.

THE HERMIT THRUSH.

IN John Burroughs' "Birds and Poets" this master singer is described as the most melodious of our songsters, with the exception of the Wood Thrush, a bird whose strains, more than any other's, express harmony and serenity, and he complains that no merited poetic monument has yet been reared to it. But there can be no good reason for complaining of the absence of appreciative prose concerning the Hermit. One writer says: "How pleasantly his notes greet the ear amid the shrieking of the wind and the driving snow, or when in a calm and lucid interval of genial weather we hear him sing, if possible, more richly than before. His song reminds us of a coming season when the now dreary landscape will be clothed in a blooming garb befitting the vernal year—of the song of the Blackbird and Lark, and hosts of other tuneful throats which usher in that lovely season. Should you disturb him when singing he usually drops down and awaits your departure, though sometimes he merely retires to a neighboring tree and warbles as sweetly as before."

In "Birdcraft" Mrs. Wright tells us, better than any one else, the story of the Hermit. She says: "This spring, the first week in May, when standing at the window about six o'clock in the morning, I heard an unusual note, and listened, thinking it at first a Wood Thrush and then a Thrasher, but soon finding that it was neither of these I opened the window softly and looked among the near by shrubs, with my glass. The wonderful melody ascended gradually in the scale as it progressed, now trilling, now legato, the most perfect, exalted, unrestrained, yet withal, finished bird song that I ever heard. At the first note I caught sight of the singer perching among the lower sprays of a dogwood tree.

I could see him perfectly: it was the Hermit Thrush. In a moment he began again. I have never heard the Nightingale, but those who have say that it is the surroundings and its continuous night singing that make it even the equal of our Hermit; for, while the Nightingales sing in numbers in the moonlit groves, the Hermit tunes his lute sometimes in inaccessible solitudes, and there is something immaterial and immortal about the song."

The Hermit Thrush is comparatively common in the northeast, and in Pennsylvania it is, with the exception of the Robin, the commonest of the Thrushes. In the eastern, as in many of the middle states, it is only a migrant. It is usually regarded as a shy bird. It is a species of more general distribution than any of the small Thrushes, being found entirely across the continent and north to the Arctic regions. It is not quite the same bird, however, in all parts of its range, the Rocky Mountain region being occupied by a larger, grayer race, while on the Pacific coast a dwarf race takes its place. It is known in parts of New England as the "Ground Swamp Robin," and in other localities as "Swamp Angel."

True lovers of nature find a certain spiritual satisfaction in the song of this bird. "In the evening twilight of a June day," says one of these, "when all nature seemed resting in quiet, the liquid, melting, lingering notes of the solitary bird would steal out upon the air and move us strangely. What was the feeling it awoke in our hearts? Was it sorrow or joy, fear or hope, memory or expectation? And while we listened, we thought the meaning of it all was coming; it was trembling on the air, and in an instant it would reach us. Then it faded, it was gone, and we could not even remember what it had been."



From col. F. M. Woodruff.

HERMIT THRUSH.
 $\frac{2}{5}$ Life-size.

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THE HERMIT THRUSH.

I am sorry, children, that I cannot give you a specimen of my song as an introduction to the short story of my life. One writer about my family says it is like this: "O spheral, spheral! O holy, holy! O clear away, clear away! O clear up, clear up!" as if I were talking to the weather. May be my notes do sound something like that, but I prefer you should hear me sing when I am alone in the woods, and other birds are silent. It is ever being said of me that I am as fine a singer as the English Nightingale. I wish I could hear this rival of mine, and while I have no doubt his voice is a sweet one, and I am not too vain of my own, I should like to "compare notes" with him. Why do not some of you children ask your parents to invite a few pairs of Nightingales to come and settle here? They would like our climate, and would, I am sure, be welcomed by all the birds with a warmth not accorded the English Sparrow, who has taken possession and, in spite of my

love for secret hiding places, will not let even me alone.

When you are older, children, you can read all about me in another part of BIRDS. I will merely tell you here that I live with you only from May to October, coming and going away in company with the other Thrushes, though I keep pretty well to myself while here, and while building my nest and bringing up my little ones I hide myself from the face of man, although I do not fear his presence. That is why I am called the Hermit.

If you wish to know in what way I am unlike my cousin Thrushes in appearance, turn to pages 84 and 182, Vol. 1, of BIRDS. There you will see their pictures. I am one of the smallest of the family, too. Some call me "the brown bird with the rusty tail," and other names have been fitted to me, as Ground Gleaner, Tree Trapper, and Seed Sower. But I do not like nicknames, and am just plain,

HERMIT THRUSH.

THE SONG SPARROW.

Glimmers gay the leafless thicket
Close beside my garden gate,
Where, so light, from post to wicket,
Hops the Sparrow, blithe, sedate;
Who, with meekly folded wing,
Comes to sun himself and sing.

It was there, perhaps, last year,
That his little house he built;
For he seemed to perk and peer
And to twitter, too, and tilt
The bare branches in between,
With a fond, familiar mien.

—GEORGE PARSONS LATHROP.

WE do not think it at all amiss to say that this darling among song birds can be heard singing nearly everywhere the whole year round, although he is supposed to come in March and leave us in November. We have heard him in February, when his little feet made tracks in the newly fallen snow, singing as cheerily as in April, May, and June, when he is supposed to be in ecstasy. Even in August, when the heat of the dog-days and his molting time drive him to leafy seclusion, his liquid notes may be listened for with certainty, while "all through October they sound clearly above the rustling leaves, and some morning he comes to the dog-wood by the arbor and announces the first frost in a song that is more direct than that in which he told of spring. While the chestnuts fall from their velvet nests, he is singing in the hedge; but when the brush heaps burn away to fragrant smoke in November, they veil his song a little, but it still continues."

While the Song Sparrow nests in

the extreme northern part of Illinois, it is known in the more southern portions only as a winter resident. This is somewhat remarkable, it is thought, since along the Atlantic coast it is one of the most abundant summer residents throughout Maryland and Virginia, in the same latitudes as southern Illinois, where it is a winter sojourner, abundant, but very retiring, inhabiting almost solely the bushy swamps in the bottom lands, and unknown as a song bird. This is regarded as a remarkable instance of variation in habits with locality, since in the Atlantic states it breeds abundantly, and is besides one of the most familiar of the native birds.

The location of the Song Sparrow's nest is variable; sometimes on the ground, or in a low bush, but usually in as secluded a place as its instinct of preservation enables it to find. A favorite spot is a deep shaded ravine through which a rivulet ripples, where the solitude is disturbed only by the notes of his song, made more sweet and clear by the prevailing silence.



From col. F. M. Woodruff.

SONG SPARROW.
 $\frac{4}{5}$ Life-size.

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THE SONG SPARROW.

DEAR YOUNG READERS:

I fancy many of the little folks who are readers of *BIRDS* are among my acquaintances. Though I have never spoken to you, I have seen your eyes brighten when my limpid little song has been borne to you by a passing breeze which made known my presence. Once I saw a pale, worn face turn to look at me from a window, a smile of pleasure lighting it up. And I too was pleased to think that I had given some one a moment's happiness. I have seen bird lovers (for we have lovers, and many of them) pause on the highway and listen to my pretty notes, which I know as well as any one have a cheerful and patient sound, and which all the world likes, for to be cheered and encouraged along the pathway of life is like a pleasant medicine to my weary and discouraged fellow citizens. For you must know I am a citizen, as my friend Dr. Coues calls me, and all my relatives. He and Mrs. Mabel Osgood Wright have written a book about us called "*Citizen Bird*," and in it they have supported us in all our rights, which even you children are beginning to admit we have. You are kinder to us than you used to be. Some of you come quickly to our rescue from untaught and

thoughtless boys who, we think, if they were made to know how sensitive we are to suffering and wrong, would turn to be our friends and protectors instead. One dear boy I remember well (and he is considered a hero by the Song Sparrows) saved a nest of our birdies from a cruel school boy robber. Why should not all strong boys become our champions? Many of them have great, honest, sympathetic hearts in their bosoms, and, if we can only enlist them in our favor, they can give us a peace and protection for which for years we have been sighing. Yes, sighing, because our hearts, though little, are none the less susceptible to all the asperities—the terrible asperities of human nature. Papa will tell you what I mean: you would not understand bird language.

Did you ever see my nest? I build it near the ground, and sometimes, when kind friends prepare a little box for me, I occupy it. My song is quite varied, but you will always recognize me by my call note, *Chek! Chek! Chek!* Some people say they hear me repeat "*Maids, maids, maids, hang on your teakettle*," but I think this is only fancy, for I can sing a real song, admired, I am sure, by all who love

SONG SPARROW.

THE CUCKOO.



OUR first introduction to the Cuckoo was by means of the apparition which issued hourly from a little German clock, such as are frequently found in country inns. This particular clock had but one dial hand, and the exact time of day could not be determined by it until the appearance of the Cuckoo, who, in a squeaking voice, seemed to announce that it was just one hour later or earlier, as the case might be, than at his last appearance. We were puzzled, and remember fancying that a sun dial, in clear weather, would be far more satisfactory as a time piece. "Coo-coo," the image repeated, and then retired until the hour hand should summon him once more.

To very few people, not students of birds, is the Cuckoo really known. Its evanescent voice is often recognized, but being a solitary wanderer even ornithologists have yet to learn much of its life history. In their habits the American and European Cuckoos are so similar that whatever of poetry and sentiment has been written of them is applicable alike to either. A delightful account of the species may be found in Dixon's *Bird Life*, a book of refreshing and original observation.

"The Cuckoo is found in the verdant woods, in the coppice, and even on the lonely moors. He flits from one stunted tree to another and utters his notes in company with the wild song of the Ring Ousel and the harsh calls of the Grouse and Plover. Though his notes are monotonous, still no one gives them this appellation. No! this little wanderer is held too dear by us all as the harbinger of spring for aught but praise to be bestowed on his mellow notes, which, though full and soft, are powerful, and may on a calm morning, before the every-day hum of human toil begins, be heard a mile away, over wood, field, and lake. Toward the summer solstice his notes

are on the wane, and when he gives them forth we often hear him utter them as if laboring under great difficulty, and resembling the syllables, "*Coo-coo-coo-coo.*"

On one occasion Dixon says he heard a Cuckoo calling in treble notes, *Cuck-oo-oo*, *cuck-oo-oo*, inexpressibly soft and beautiful, notably the latter one. He at first supposed an echo was the cause of these strange notes, the bird being then half a mile away, but he satisfied himself that this was not the case, as the bird came and alighted on a noble oak a few yards from him and repeated the notes. The Cuckoo utters his notes as he flies, but only, as a rule, when a few yards from the place on which he intends alighting.

The opinion is held by some observers that Nature has not intended the Cuckoo to build a nest, but influences it to lay its eggs in the nests of other birds, and intrust its young to the care of those species best adapted to bring them to maturity. But the American species does build a nest, and rears its young, though Audubon gives it a bad character, saying: "It robs smaller birds of their eggs." It does not deserve the censure it has received, however, and it is useful in many ways. Its hatred of the worm is intense, destroying many more than it can eat. So thoroughly does it do its work, that orchards, which three years ago, were almost leafless, the trunks even being covered by slippery webbing, are again yielding a good crop.

In September and October the Cuckoo is silent and suddenly disappears. "He seldom sees the lovely tints of autumn, and never hears the wintry storm-winds' voice, for, impelled by a resistless impulse, he wings his way afar over mountain, stream, and sea, to a land where northern blasts are not felt, and where a summer sun is shining in a cloudless sky."



From col. O. E. Pagin.

YELLOW-BILLED CUCKOO.
 $\frac{1}{2}$ Life-size.

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THE RUBY-THROATED HUMMING BIRD.

Is it a gem, half bird,
Or is it a bird, half gem?

—EDGAR FAWCETT.



F all animated beings this is the most elegant in form and the most brilliant in colors, says the great naturalist Buffon. The stones and metals polished by our arts are not comparable to this jewel of Nature. She has it least in size of the order of birds, *maxime miranda in minimis*. Her masterpiece is the Humming-bird, and upon it she has heaped all the gifts which the other birds may only share. Lightness, rapidity, nimbleness, grace, and rich apparel all belong to this little favorite. The emerald, the ruby, and the topaz gleam upon its dress. It never soils them with the dust of earth, and its aerial life scarcely touches the turf an instant. Always in the air, flying from flower to flower, it has their freshness as well as their brightness. It lives upon their nectar, and dwells only in the climates where they perennially bloom.

All kinds of Humming-birds are found in the hottest countries of the New World. They are quite numerous and seem to be confined between the two tropics, for those which penetrate the temperate zones in summer stay there only a short time. They seem to follow the sun in its advance and retreat; and to fly on the zephyr wing after an eternal spring.

The smaller species of the Humming-birds are less in size than the great fly wasp, and more slender than the drone. Their beak is a fine needle and their tongue a slender thread. Their little black eyes are like two shining points, and the feathers of their wings so delicate that they seem transparent. Their short feet, which they use very little, are so tiny one can scarcely see them. They rarely alight during the day. They have a

swift continual humming flight. The movement of their wings is so rapid that when pausing in the air, the bird seems quite motionless. One sees him stop before a blossom, then dart like a flash to another, visiting all, plunging his tongue into their hearts, flattening them with his wings, never settling anywhere, but neglecting none. He hastens his inconstancies only to pursue his loves more eagerly and to multiply his innocent joys. For this light lover of flowers lives at their expense without ever blighting them. He only pumps their honey, and for this alone his tongue seems designed.

The vivacity of these small birds is only equaled by their courage, or rather their audacity. Sometimes they may be seen furiously chasing birds twenty times their size, fastening upon their bodies, letting themselves be carried along in their flight, while they peck fiercely until their tiny rage is satisfied. Sometimes they fight each other vigorously. Impatience seems their very essence. If they approach a blossom and find it faded, they mark their spite by a hasty rending of the petals. Their only voice is a weak cry of *Scree, scree*, frequent and repeated, which they utter in the woods from dawn until at the first rays of the sun they all take flight and scatter over the country.

The Ruby-throat is the only native Humming-bird of eastern North America, where it is a common summer resident from May to October, breeding from Florida to Labrador. The nest is a circle an inch and a half in diameter, made of fern wood, plant down, and so forth, shingled with lichens to match the color of the branch on which it rests. Its only note is a shrill, mouse-like squeak.

THE HOUSE WREN.

All the children, it seems to me, are familiar with the habits of Johnny and Jenny Wren; and many of them, especially such as have had some experience with country life, could themselves tell a story of these mites of birds. Mr. F. Saunders tells one: "Perhaps you may think the Wren is so small a bird he cannot sing much of a song, but he can. The way we first began to notice him was by seeing our pet cat jumping about the yard, dodging first one way and then another, then darting up a tree; looking surprised, and disappointingly jumping down again.

"Pussy had found a new play-mate, for the little Wren evidently thought it great fun to fly down just in front of her and dart away before she could reach him, leading her from one spot to another, hovering above her head, chattering to her all the time, and at last flying up far out of her reach. This he repeated day after day, for some time, seeming to enjoy the fun of disappointing her so nicely and easily. But after a while the little fellow thought he would like a play-mate nearer his own size, and went off to find one. But he came back all

alone, and perched himself on the very tip-top of a lightning-rod on a high barn at the back of the yard; and there he would sing his sweet little trilling song, hour after hour, hardly stopping long enough to find food for his meals. We wondered that he did not grow tired of it. For about a week we watched him closely, and one day I came running into the house to tell the rest of the family with surprise and delight that our little Wren knew what he was about, for with his winning song he had called a mate to him. He led her to the tree where he had played with pussy, and they began building a nest; but pussy watched then as well as we, and meant to have her revenge upon him yet, so she sprang into the tree, tore the nest to pieces, and tried to catch Jenny. The birds rebuilt their nest three times, and finally we came to their rescue and placed a box in a safe place under the eaves of the house, and Mr. Wren with his keen, shrewd eyes, soon saw and appropriated it. There they stayed and raised a pretty family of birdies; and I hope he taught them, as he did me, a lesson in perseverance I'll never forget."



From col. F. M. Woodruff.

RUBY-THROATED HUMMING BIRDS.
Life-size.

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From col. F. M. Woodruff.

HOUSE WREN.
Life-size.

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THE RUBY-THROATED HUMMING BIRD.

DEAR YOUNG FOLKS :

I fancy you think I cannot stop long enough to tell you a story, even about myself. It is true, I am always busy with the flowers, drinking their honey with my long bill, as you must be busy with your books, if you would learn what they teach. I always select for my food the sweetest flowers that grow in the garden.

Do you think you would be vain if you had my beautiful colors to wear? Of course, you would not, but so many of my brothers and sisters have been destroyed to adorn the bonnets and headdressès of the thoughtless that the children cannot be too early taught to love us too well to do us harm. Have you ever seen a ruby? It is one of the most valued of gems. It is the color of my throat, and from its rare and brilliant beauty I get a part of my name. The ruby is worn by great ladies and, with the emerald and topaz, whose bright colors I also wear, is much esteemed as an ornament.

If you will come into the garden in the late afternoon, between six and seven o'clock,

when I am taking my supper, and when the sun is beginning to close his great eye, you will see his rays shoot sidewise and show all the splendor of my plumage. You will see me, too, if your eyes are sharp enough, draw up my tiny claws, pause in front of a rose, and remain seemingly motionless. But listen, and you will hear the reason for my name—a tense humming sound. Some call me a Hummer indeed.

I spend only half the year in the garden, coming in May and saying farewell in October. After my mate and I are gone you may find our nest. But your eyes will be sharp indeed if they detect it when the leaves are on the trees, it is so small and blends with the branches. We use fern-wool and soft down to build it, and shingle it with lichens to match the branch it nests upon. You should see the tiny eggs of pure white. But we, our nest and our eggs, are so dainty and delicate that they should never be touched. We are only to be looked at and admired.

Farewell. Look for me when you go a-Maying. RUBY.

THE HOUSE WREN.

"It was a merry time
When Jenny Wren was young,
When prettily she looked,
And sweetly, too, she sung."

"I N looking over an old memorandum book the other day," says Col. S. T. Walker, of Florida, "I came across the following notes concerning the nesting of the House Wren. I was sick at the time, and watched the whole proceeding, from the laying of the first stick to the conclusion. The nest was placed in one of the pigeon-holes of my desk, and the birds effected an entrance to the room through sundry cracks in the log cabin.

Nest begun	April 15th.
Nest completed and first egg laid,	April 27.
Last egg laid	May 3rd.
Began sitting	May 4th.
Hatching completed	May 18th.
Young began to fly	May 27th.
Young left the nest	June 1st.
Total time occupied	47 days.

Such is the usual time required for bringing forth a brood of this species of Wren, which is the best known of the family. In the Atlantic states it is more numerous than in the far west, where wooded localities are its chosen haunts, and where it is equally at home in the cottonwoods of the river valleys, and on the aspens just below the timber line on lofty mountains.

Mrs. Osgood Wright says very quaintly that the House Wren is a bird who has allowed the word *male* to be obliterated from its *social* constitution at least: that we always speak of Jenny Wren: always refer to the

Wren as *she*, as we do of a ship. That it is Johnny Wren who sings and disports himself generally, but it is Jenny, who, by dint of much scolding and fussing, keeps herself well to the front. She chooses the building-site and settles all the little domestic details. If Johnny does not like her choice, he may go away and stay away; she will remain where she has taken up her abode and make a second matrimonial venture.

The House Wren's song is a merry one, sudden, abruptly ended, and frequently repeated. It is heard from the middle of April to October, and upon the bird's arrival it at once sets about preparing its nest, a loose heap of sticks with a soft lining, in holes, boxes, and the like. From six to ten tiny, cream-colored eggs are laid, so thickly spotted with brown that the whole egg is tinged.

The House Wren is not only one of our most interesting and familiar neighbors, but it is useful as an exterminator of insects, upon which it feeds. Frequently it seizes small butterflies when on the wing. We have in mind a sick child whose convalescence was hastened and cheered by the near-by presence of the merry House Wren, which sings its sweet little trilling song, hour after hour, hardly stopping long enough to find food for its meals.



From col. J. G. Parker, Jr.

PHOEBE.
3/4 Life-size.

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THE PHOEBE.

Oft the Phoebe's cheery notes
Wake the laboring swain;
"Come, come!" say the merry throats,
"Morn is here again."
Phoebe, Phoebe! let them sing for aye,
Calling him to labor at the break of day.

—C. C. M.

NEARLY everywhere in the United States we find this cheerful bird, known as Pewee, Barn Pewee, Bridge Pewee, or Phoebe, or Pewit Flycatcher. "It is one of that charming coterie of the feathered tribe who cheer the abode of man with their presence." There are few farmyards without a pair of Pewees, who do the farmer much service by lessening the number of flies about the barn, and by calling him to his work in the morning by their cheery notes.

Dr. Brewer says that this species is attracted both to the vicinity of water and to the neighborhood of dwellings, probably for the same reason—the abundance of insects in either situation. They are a familiar, confiding, and gentle bird, attached to localities, and returning to them year after year. Their nests are found in sheltered situations, as under a bridge, a projecting rock, in the porches of houses, etc. They have been known to build on a small shelf in the porch of a dwelling, against the wall of a railroad station, within reach of the passengers, and under a projecting window-sill, in full view of the family, entirely

unmoved by the presence of the latter at meal time.

Like all the flycatcher family the Phoebe takes its food mostly flying. Mrs. Wright says that the Pewee in his primitive state haunts dim woods and running water, and that when domesticated he is a great bather, and may be seen in the half-light dashing in and out of the water as he makes trips to and from the nest. After the young are hatched both old and young disport themselves about the water until moulting time. She advises: "Do not let the Phoebes build under the hoods of your windows, for their spongy nests harbor innumerable bird-lice, and under such circumstances your fly-screens will become infested and the house invaded."

In its native woods the nest is of moss, mud, and grass placed on a rock, near and over running water; but in the vicinity of settlements and villages it is built on a horizontal bridge beam, or on timber supporting a porch or shed. The eggs are pure white, somewhat spotted. The notes, to some ears, are *Phoebe, phoebe, pewit, phoebe!* to others, of somewhat duller sense of hearing, perhaps, *Pewee, pewee, pewee!* We confess to a fancy that the latter is the better imitation.

THE RUBY-CROWNED KINGLET.

BASKETT says that the Kinglets come at a certain early spring date before the leaves are fully expanded, and flutter upward, while they take something from beneath the budding leaf or twig. It is a peculiar motion, which with their restless ways, olive-green color, and small size, readily distinguishes them. It is rare that one is still. "But the ruby-crowned sometimes favors me with a song, and as it is a little long, he usually is quiet till done. It is one of the sweetest little lullaby-like strains. One day I saw him in the rose bush just near voluntarily expand the plumage of his crown and show the brilliant golden-ruby feathers beneath. Usually they are mostly concealed. It was a rare treat, and visible to me only because of my rather exalted view. He generally reserves this display for his mate, but he was here among some Snow-birds and Tree Sparrows, and seemed to be trying to make these plain folks envious of the pretty feathers in his hat."

These wonderfully dainty little birds are of great value to the farmer and the fruit grower, doing good work among all classes of fruit trees by killing grubs and larvae. In spite of their value in this respect, they have been, in common with many other

attractive birds, recklessly killed for millinery purposes.

It is curious to see these busy wanderers, who are always cheery and sociable, come prying and peering about the fruit trees, examining every little nook of possible concealment with the greatest interest. They do not stay long after November, and return again in April.

The nest of this Kinglet is rarely seen. It is of matted hair, feathers, moss, etc., bulky, round, and partly hanging. Until recently the eggs were unknown. They are of a dirty cream-white, deepening at larger end to form a ring, some specimens being spotted.

Mr. Nehrling, who has heard this Kinglet sing in central Wisconsin and northern Illinois, speaks of the "power, purity, and volume of the notes, their faultless modulation and long continuance," and Dr. Elliott Coues says of it: "The Kinglet's exquisite vocalization defies description." Dr. Brewer says that its song is clear, resonant, and high, a prolonged series, varying from the lowest tones to the highest, and terminating with the latter. It may be heard at quite a distance, and in some respects bears more resemblance to the song of the English Sky-lark than to that of the Canary, to which Mr. Audubon compares it.



From col. F. M. Woodruff.

RUBY-CROWNED KINGLET.
Life-size.

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THE MOURNING DOVE.

THE DOVE AND THE STRANGER.

Stranger—Why mourning there so sad, thou gentle dove?

Dove— I mourn, unceasing mourn, my vanished love.

Stranger—What, has thy love then fled, or faithless proved?

Dove— Ah no! the sportsman wounded him I loved!

Stranger—Unhappy one! beware! that sportman's nigh!

Dove— Oh, let him come—or else of grief I die.—FROM THE RUSSIAN.

THROUGHOUT the State of Illinois and adjacent states this bird of sad refrain is a permanent resident, though less numerous and of uncertain occurrence in winter. In the spring of 1883, all the specimens seen at Wheatland, Indiana, had the ends of the toes frozen off, showing that they had braved the almost unprecedented cold of the preceding winter. They have been known to winter as far north as Canada, and in December considerable numbers have been seen about Windsor, Ontario.

The female is a little smaller than the male, and the young are duller and more brownish in color. In many places the Mourning Dove becomes half domesticated, nesting in the trees in the yard, showing but little fear when approached. While the Turtle Dove keeps the deepest woodland solitudes, and rarely seeks the fields and open places, this Dove is as often seen out of the woods as in them, for the greater part of the year at least; and, though a wary bird, it is not what we can call a shy one.

The love note of the Mourning Dove, though somewhat monotonous, "sounds particularly soothing and pleasant as we wander through the otherwise almost silent woods, just as they are about to don their leafy vestures, under the gentle influence of an April sun." If the birds be abundant, their low and plaintive note, *Coo-oo-oo, coo-oo-oo*, fills the entire forest with its murmur. Gentle, indeed, as the Dove is thought to be, still this does not hold good in the mating season, for two male birds will often fight with fury for the possession of a female. These encounters, however,

are only between young or single birds.

If unmolested, these birds will nest in one certain locality for years. Mrs. Wright says the female is a most prettily shiftless house-wife. "Even though her mate should decline to furnish her with more liberal supply of sticks, she could arrange those she has to better advantage; but she evidently lacks that indispensable something, called *faculty*, which must be inborn. The eggs or bodies of the young show plainly through the rude platform and bid fair to either fall through it or roll out, but they seldom do. Meanwhile she coos regretfully, but does not see her way to bettering things, saying 'I know I'm a poor house-keeper, but it runs in our family;' but when the Dove chooses a flattened out Robin's nest for a platform, the nestlings fare very well."

The Dove's food is confined mainly to vegetable matter, peas, beans, lintels, grains, and small seeds of various kinds. They frequent newly sown land and feed upon the seed grain; they search under the oak trees for acorns, and under beech trees for mast, sometimes feeding in the branches; in autumn the stubble field is a favorite feeding spot, where they pick up the scattered grain, and eat the tender heart shoots of the clover, and, Dixon says, they feed upon the growing turnip plants, and in keen weather when the snow lies deep they will make a meal on the turnips themselves. In their favor, however, is the fact that in the crops of these Doves are often found the seeds of noxious weeds, as the charlock and dock.

THE MOURNING DOVE.

DEAR YOUNG BIRD LOVERS :

Most every person thinks that, while my actions are very pretty and attractive, and speak much in my favor, I can only really say, *Coo-o, Coo-o*, which they also think does not mean anything at all. Well, I just thought I would undeceive them by writing you a letter. Many grown up people fancy that we birds cannot express ourselves because we don't know very much. Of course, there is a good reason why they have this poor opinion of us. They are so busy with their own private concerns that they forget that there are little creatures like ourselves in the world who, if they would take a little time to become acquainted with them, would fill their few hours of leisure with a sweeter recreation than they find in many of their chosen outings. A great English poet, whose writings you will read when you get older, said you should look through Nature up to Nature's God. What did he mean? I think he had us birds in his mind, for it is through a study of our habits, more perhaps than that of the voiceless trees or the dumb four-footed creatures that roam the fields, that your hearts are opened to see and admire real beauty. We birds are the true teachers of faith, hope, and

charity,—faith, because we trust one another; hope, because, even when our mother Nature seems unkind, sending the drifting snow and the bitter blasts of winter, we sing a song of summer time; and charity, because we are never fault finders.

I believe, without knowing it, I have been telling you about myself and my mate. We Doves are very sincere, and every one says we are constant.

If you live in the country, children, you must often hear our voices. We are so tender and fond of each other that we are looked upon as models for children, and even grown-up folks. My mate does not build a very nice nest—only uses a few sticks to keep the eggs from falling out—but she is a good mother and nurses the little ones very tenderly. Some people are so kind that they build for us a dove cote, supply us with wheat and corn, and make our lives as free from care and danger as they can. Come and see us some day, and then you can tell whether my picture is a good one. The artist thinks it is and he certainly took lots of pains with it.

Now, if you will be kind to all birds, you will find me, in name only,

MOURNING DOVE.



From col. F. M. Woodruff.

MOURNING DOVE.
 $\frac{3}{8}$ Life-size.

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HOW THE BIRDS SECURED THEIR RIGHTS.

Deuteronomy xxxii 6-7.—“If a bird's nest chance to be before thee in the way, in any tree, or on the ground, young ones or eggs, and the dam sitting upon the young, or upon the eggs, thou shalt not take the dam with the young. But thou shalt in anywise let the dam go, that it may be well with thee, and that thou may prolong thy days.”

IT is said that the following petition was instrumental in securing the adoption in Massachusetts of a law prohibiting the wearing of song and insectivorous birds on women's hats. It is stated that the interesting document was prepared by United States Senator Hoar. The foregoing verse of Scripture might have been quoted by the petitioning birds to strengthen their position before the lawmakers:

“TO THE GREAT AND GENERAL COURT OF THE COMMONWEALTH OF MASSACHUSETTS: We, the song birds of Massachusetts and their playfellows, make this our humble petition. We know more about you than you think we do. We know how good you are. We have hopped about the roofs and looked in at the windows of the houses you have built for poor and sick and hungry people, and little lame and deaf and blind children. We have built our nests in the trees and sung many a song as we flew about the gardens and parks you have made so beautiful for your children, especially your poor children, to play in. Every year we fly a great way over the country, keeping all the time where the sun is bright and warm. And we know that whenever you do anything the other people all over this great land between the seas and the great lakes find it out, and pretty soon will try to do the same. We know. We know.

“We are Americans just the same as you are. Some of us, like some of you, came across the great sea. But most of the birds like us have lived here a long while; and the birds like us welcomed your fathers when they came here many, many years ago. Our

fathers and mothers have always done their best to please your fathers and mothers.

“Now we have a sad story to tell you. Thoughtless or bad people are trying to destroy us. They kill us because our feathers are beautiful. Even pretty and sweet girls, who we should think would be our best friends, kill our brothers and children so that they may wear our plumage on their hats. Sometimes people kill us for mere wantonness. Cruel boys destroy our nests and steal our eggs and our young ones. People with guns and snares lie in wait to kill us; as if the place for a bird were not in the sky, alive, but in a shop window or in a glass case. If this goes on much longer all our song birds will be gone. Already we are told in some other countries that used to be full of birds they are now almost gone. Even the Nightingales are being killed in Italy.

“Now we humbly pray that you will stop all this and will save us from this sad fate. You have already made a law that no one shall kill a harmless song bird or destroy our nests or our eggs. Will you please make another one that no one shall wear our feathers, so that no one shall kill us to get them? We want them all ourselves. Your pretty girls are pretty enough without them. We are told that it is as easy for you to do it as for a blackbird to whistle.”

“If you will, we know how to pay you a hundred times over. We will teach your children to keep themselves clean and neat. We will show them how to live together in peace and love and to agree as we do in our nests. We will build pretty houses which you will like to see. We will

play about your garden and flowerbeds—ourselves like flowers on wings—without any cost to you. We will destroy the wicked insects and worms that spoil your cherries and currants and plums and apples and roses. We will give you our best songs, and make the spring more beautiful and the summer sweeter to you. Every June morning when you go out into the field, Oriole and Bluebird and Blackbird and Bobolink will fly after you, and make the day more delightful to you. And when you go home tired after sundown Vesper Sparrow will tell you how grateful we are. When you sit down on your porch after dark, Fifebird and Hermit Thrush and Wood Thrush will sing to you; and even Whip-poor-will will cheer you up a little. We

know where we are safe. In a little while all the birds will come to live in Massachusetts again, and everybody who loves music will like to make a summer home with you."

The singers are:

Brown Thrasher,	King Bird,
Robert o'Lincoln,	Swallow,
Vesper Sparrow,	Cedar Bird,
Hermit Thrush,	Cow Bird,
Robin Redbreast.	Martin,
Song Sparrow,	Veery,
Scarlet Tanager,	Vireo,
Summer Redbird,	Oriole,
Blue Heron,	Blackbird,
Humming Bird,	Fife Bird,
Yellow Bird,	Wren,
Whip-poor-will,	Linnet,
Water Wagtail,	Pewee,
Woodpecker,	Phoebe,
Pigeon Woodpecker,	Yoke Bird,
Indigo Bird,	Lark,
Yellow Throat,	Sandpiper,
Wilson's Thrush,	Chewink.
Chickadee.	

THE CAPTIVE'S ESCAPE.

I saw such a sorrowful sight, my dears,
Such a sad and sorrowful sight,
As I lingered under the swaying vines,
In the silvery morning light.
The skies were so blue and the day was so fair
With beautiful things untold,
You would think no sad and sorrowful thing
Could enter its heart of gold.

A fairy-like cage was hanging there,
So gay with turret and dome,
You'd be sure a birdie would gladly make
Such a beautiful place its home.
But a wee little yellow-bird sadly chirped
As it fluttered to and fro;
I know it was longing with all its heart
To its wild-wood home to go.

I heard a whir of swift-rushing wings,
And an answering gladsome note;
As close to its nestlings prison bars,
I saw the poor mother bird float.
I saw her flutter and strive in vain
To open the prison door.
Then sadly cling with drooping wing
As if all her hopes were o'er.

But ere I could reach the prison house
And let its sweet captive free,
She was gone like a yellow flash of light,
To her home in a distant tree.
"Poor birdie," I thought, "you shall surely go,
When mamma comes back again;"
For it hurt me so that so small a thing
Should suffer so much of pain.

And back in a moment she came again
And close to her darling's side
With a bitter-sweet drop of honey dew,
Which she dropped in its mouth so wide.
Then away, with a strange wild mournful note
Of sorrow, which seemed to say
"Goodbye, my darling, my birdie dear,
Goodbye for many a day."

A quick wild flutter of tiny wings,
A faint low chirp of pain,
A throb of the little aching heart
And birdie was free again.
Oh sorrowful anguished mother-heart,
'Twas all that she could do,
She had set it free from a captive's life
In the only way she knew.

Poor little birdie! it never will fly
On tiny and tireless wing,
Through the pearly blue of the summer sky,
Or sing the sweet songs of spring.
And I think, little dears, if you had seen
The same sad sorrowful sight,
You never would cage a free wild bird
To suffer a captive's plight.

—MARY MORRISON.



From col. F. M. Woodruff.

WHITE-BREASTED NUT HATCH.
Life-size.

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THE WHITE-BREASTED NUTHATCH.

NEARLY every one readily recognizes this species as it runs up and down and around the branches and trunks of trees in search of insect food, now and then uttering its curious *Quauk, quauk, quauk*. The White-breasted Nuthatch is often improperly called "Sapsucker," a name commonly applied to the Downy Woodpecker and others. It is a common breeding bird and usually begins nesting early in April, and two broods are frequently reared in a season. For its nesting place it usually selects the decayed trunk of a tree or stub, ranging all the way from two to sixty feet above the ground. The entrance may be a knot hole, a small opening, or a small round hole with a larger cavity at the end of it. Often the old excavation of the Downy Woodpecker is made use of. Chicken feathers, hair, and a few dry leaves loosely thrown together compose the nest.

This Nuthatch is abundant throughout the State of Illinois, and is a permanent resident everywhere except perhaps of the extreme northern counties. It seems to migrate in spring and return in autumn, but, in reality, as is well known, only retreats to the woodlands to breed, emerging again when the food supply grows scant in the autumn.

The Nuthatches associate familiarly with the Kinglets and Titmice, and often travel with them. Though regarded as shy birds they are not really so. Their habits of restlessness render them difficult of examination. "Tree-mice" is the local name given them by the farmers, and would be very appropriate could they sometimes remain as motionless as that diminutive animal.

Careful observation has disclosed that the Nuthatches do not suck the sap from trees, but that they knock off bits of decayed or loose bark with

the beak to obtain the grubs or larvae beneath. They are beneficial to vegetation. Ignorance is responsible for the misapplied names given to many of our well disposed and useful birds, and it would be well if teachers were to discourage the use of inappropriate names and familiarize the children with those recognized by the best authorities.

Referring to the Nuthatches Mr. Basket says: "They are little bluish gray birds, with white undervests—sometimes a little soiled. Their tails are ridiculously short, and never touch the tree; neither does the body, unless they are suddenly affrighted, when they crouch and look, with their beaks extended, much like a knot with a broken twig on it. I have sometimes put the bird into this attitude by clapping my hands loudly near the window. It is an impulse that seems to come to the bird before flight, especially if the head should be downward. His arrival is sudden, and seems often to be distinguished by turning a somersault before alighting, head downward, on the tree trunk, as if he had changed his mind so suddenly about alighting that it unbalanced him.

I once saw two Nuthatches at what I then supposed was a new habit. One spring day some gnats were engaged in their little crazy love waltzes in the air, forming small whirling clouds, and the birds left off bark-probing and began capturing insects on the wing. They were awkward about it with their short wings, and had to alight frequently to rest. I went out to them, and so absorbed were they that they allowed me to approach within a yard of a limb that I came to rest upon, where they would sit and pant till they caught their breath, when they went at it again. They seemed fairly to revel in a new diet and a new exercise."

SUMMARY

Page 83.

YELLOW WARBLER.—*Dendroica aestiva*. Other names: "Summer Yellow-bird," "Wild Canary," "Yellow-poll Warbler."

RANGE—The whole of North America; breeding throughout its range. In winter, the whole of middle America and northern South America.

NEST—Built in an apple tree, cup-shaped, neat and compact, composed of plant fibres, bark, etc.

EGGS—Four or five; greenish-white, spotted
Page 88.

HERMIT THRUSH.—*Turdus aonalaschkæ pallasii*. Other names: "Swamp Angel," "Ground Swamp Robin."

RANGE—Eastern North America, breeding from northern United States northward; wintering from about latitude 40° to the Gulf coast.

NEST—On the ground, in some low, secluded spot, beneath shelter of deep shrubbery. Bulky and loosely made of leaves, bark, grasses, mosses, lined with similar finer material.

EGGS—Three or four; of greenish blue, unspotted.

Page 91.

SONG SPARROW.—*Melospiza fasciata*.

RANGE—Eastern United States and British Provinces, west to the Plains, breeding chiefly north of 40°, except east of the Alleghenies.

NEST—On the ground, or in low bushes, of grasses, weeds, and leaves, lined with fine grass stems, roots, and, in some cases, hair.

EGGS—Four to seven; varying in color from greenish or pinkish white to light bluish green, spotted with dark reddish brown.

Page 95.

YELLOW-BILLED CUCKOO.—*Coccyzus americanus*. Other names: "Rain Crow," "Rain Dove," and "Chow-Chow."

RANGE—Eastern North America to British Provinces, west to Great Plains, south in winter, West Indies and Costa Rica.

NEST—In low tree or bush, of dried sticks, bark strips and catkins.

EGGS—Two to four; of glaucous green which fades on exposure to the light.

Page 100.

RUBY THROATED HUMMING BIRD.—*Trochilus colubris*.

RANGE—Eastern North America to the Plains, north to the fur countries, and south in winter to Cuba and Veragua.

NEST—A circle an inch and a half in diameter, made of fern wool, etc., shingled with

lichens to match the color of the branch on which it is saddled.

EGGS—Two; pure white, the size of soup beans.

Page 101.

HOUSE WREN.—*Troglodytes aedon*.

RANGE—Eastern United States and southern Canada, west to the Mississippi Valley; winters in southern portions.

NEST—Miscellaneous rubbish, sticks, grasses, hay, and the like.

EGGS—Usually seven; white, dotted with reddish brown.

Page 106.

PHOEBE.—*Sayornis phæbe*. Other names: "Pewit," "Pewee."

RANGE—Eastern North America; in winter south to Mexico and Cuba.

NEST—Compactly and neatly made of mud and vegetable substances, with lining of grass and feathers.

EGGS—Four or five; pure white, sometimes sparsely spotted with reddish brown dots at larger end.

Page 110.

RUBY-CROWNED KINGLET.—*Regulus calendula*.

RANGE—Entire North America, wintering in the South and in northern Central America.

NEST—Very rare, only six known; of hair, feathers, moss, etc., bulky, globular, and partly pensile.

EGGS—Five to nine; dull whitish or pale puffy, speckled.

Page 113.

MOURNING DOVE.—*Zenaidura macrura*. Other names: "Carolina Dove," "Turtle Dove."

RANGE—Whole of temperate North America, south to Panama and the West Indies.

NEST—Rim of twigs sufficient to retain the eggs.

EGGS—Usually two; white.

Page 118.

WHITE-BREASTED NUTHATCH.—*Sitta carolinensis*. Other name: "Sapsucker," improperly called.

RANGE—Eastern United States and British Provinces.

NEST—Decayed trunk of tree or stub, from two to six feet from ground, composed of chicken feathers, hair, and dry leaves.

EGGS—Five to eight; white with a roseate tinge, speckled with reddish brown and a slight tinge of purple.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

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BIRDS IN CAPTIVITY.

IT was our intention in this article to give a number of instances of a pathetic nature concerning the sufferings of the various species of birds which it has been, and still is, a habit with many people to keep confined in cages totally inadequate for any other purpose than that of cruelty. The argument that man has no moral right to deprive an innocent creature of liberty will always be met with indifference by the majority of people, and an appeal to their intelligence and humanity will rarely prove effective. To capture singing birds for any purpose is, in many states, prohibited by statute. But the law is violated. Occasionally an example is made of one or more transgressors, but as a rule the officers of the law, whose business it should be to prevent it, manifest no interest whatever in its execution. The bird trappers as well know that it is against the law, but so long as they are unmolested by the police, they will continue the wholesale trapping. A contemporary recently said: "It seems strange that this bird-catching industry should increase so largely simultaneously with the founding of the Illinois Audubon Society. The good that that society has done in checking the habit of wearing birds in bonnets, seems to have been fairly counterbalanced by the increase in the number of songsters captured for cage purposes.

These trappers choose the nesting season as most favorable for their work, and every pair of birds they catch means the loss of an entire family in the shape of a set of eggs or a nestful of young left to perish slowly by starvation."

This is the way the trappers proceed. They are nearly all Germans. Bird snaring is a favorite occupation in Germany and the fondness for the cruel work was not left behind by the emigrants. More's the pity. These fellows fairly swarm with their bird limes and traps among the suburbs, having an eye only to the birds of brightest plumage and sweetest song. "They use one of the innocents as a bait to lure the others to a prison." "Two of the trappers," says one who watched them, "took their station at the edge of an open field, skirted by a growth of willows. Each had two cage traps. The device was divided into two parts by wires running horizontally and parallel to the plane of the floor. In the lower half of each cage was a male American Goldfinch. In the roof of the traps were two little hinged doors, which turned backward and upward, leaving an opening. Inside the upper compartment of the trap, and accessible through the doorway in the roof, was a swinging perch. The traps were placed on stumps among the growth of thistles and dock weed, while the trappers hid behind the trees. The Goldfinches confined

in the lower sections of the traps had been the victims of the trappers earlier in the season, and the sight of their familiar haunts, the sunlight, the breeze, and the swaying willow branches, where so often they had perched and sung, caused them to flutter about and to utter pathetically the call note of their days of freedom. It is upon this yearning for liberty and its manifestation that the bird trappers depend to secure more victims. No sooner does the piping call go forth from the golden throats of the little prisoners, than a reply comes from the thistle tops, far down the field. A moment more and the traps are surrounded with the black and yellow beauties. The fact that one of their own kind is within the curious little house which confronts them seems to send all their timidity to the winds and they fairly fall over one another in their endeavor to see what it all means. Finally one finds the doorway in the roof and drops upon the perch within. Instantly the doors close and a Goldfinch is a prisoner."

Lawrence Sterne alone, of sentimental writers, has put in adequate language something of the feeling that should stir the heart of the sympathetic, at least, on seeing the unjust confinement of innocent birds. The Starling, which is the subject of his elevated sentiment, will appear in an early number of *BIRDS*. Sterne had just been soliloquizing somewhat favorably of the Bastile, when a voice, which he took to be that of a child, complained "it could not get out." "I looked up and down the passage, and seeing neither man, woman, nor child, I went out without further attention. In my return back through the passage, I heard the same words repeated twice over, and looking up, I saw it was a Starling hung in a little cage. 'I can't get out, I can't get out,' said the Starling. I stood look-

ing at the Bird, and to every person who came through the passage, it ran fluttering to the side, towards which they approached it, with the same lamentation of its captivity. 'I can't get out,' said the Starling. 'God help thee!' said I, 'but I'll let thee out, cost what it will;' so I turned about the cage to get the door. It was twisted and double-twisted so fast with wire, there was no getting it open without pulling the cage to pieces. I took both hands to it. The bird flew to the place where I was attempting its deliverance, and thrusting his head through the trellis, pressed his breast against it as if impatient. 'I fear, poor creature,' said I, 'I can't set thee at liberty.' 'No,' said the Starling, 'I can't get out,' 'I can't get out,' said the Starling. I vow I never had my affections more tenderly awakened; or do I remember an incident in my life where the dissipated spirits, to which my reason had been a bubble, were so suddenly called home. Mechanical as the notes were, yet so true in tune to Nature were they chanted, that disguise thyself as thou wilt, still, Slavery,' said I, 'still thou art a bitter draught; and though thousands in all ages have been made to drink of thee, thou art no less bitter on that account. No, thou thrice sweet and gracious goddess liberty, whose taste is grateful, and ever will be so, till nature herself shall change; no tint of woods can spot thy snowy mantle.'"

The bird in his cage pursued Sterne into his room, where he composed his apostrophe to liberty. It would be well indeed, if a sentiment could be aroused which would prohibit absolutely the caging of birds, as well as their wanton destruction, and if the children are taught that "tenderness which is the charm of youth," another generation will see it accomplished.

C. C. MARBLE.



From col. Chi. Acad. Sciences.

BLACKBURNIAN WARBLER.
Life-size.

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THE BLACKBURNIAN WARBLER.

IF the children had had the naming of birds we venture to say that it would have been more appropriately done, and "Blackburnian," as many other names of Warblers, would have had no place in literature. There are about seventy-five well known Warblers, nearly all with common names indicating the most characteristic colors or habits, or partly descriptive of the bird itself. The common names of this beautiful Warbler are Orange-throated Warbler and Hemlock Warbler. Some one has suggested that it should be called the Torch Bird, for "half a dozen of them as they flash about in the pines, raising their wings and jerking their tails, make the darkest shadows seem breaking into little tongues of flame."

The Orange-throat is only migratory in Illinois, passing through in spring and fall, its summer home being chiefly if not wholly, to the northward, while it passes the winter in Central America and northern South America. It is found in New York and in portions of Massachusetts, frequenting the coniferous forests, and building its nest in bushes or small trees a few feet above the ground. Dr. C. Hart Merriam found a pair of these birds nesting in a grove of large white pines in Lewis county, New York. In the latter part of May the female was observed building, and on the second of June the nest contained four fresh eggs of the Warbler and one of the Cow bird. The nest was saddled on the horizontal limb about eight feet from the ground and about ten feet from the trunk. Nests have been found in pine trees in

Southern Michigan at an elevation of forty feet. In all cases the nests are placed high in hemlocks or pines, which are the bird's favorite resorts. From all accounts the nests of this species are elegantly and compactly made, consisting of a densely woven mass of spruce twigs, soft vegetable down, rootlets, and fine shreds of bark. The lining is often intermixed with horse hairs and feathers. Four eggs of greenish-white or very pale bluish-green, speckled or spotted, have usually been found in the nests.

The autumnal male Warblers resemble the female. They have two white bands instead of one; the black stripes on the side are larger; under parts yellowish; the throat yellowish, passing into purer yellow behind. Few of our birds are more beautiful than the full plumaged male of this lovely bird, whose glowing orange throat renders it a conspicuous object among the budding and blossoming branches of the hemlocks. Chapman says, coming in May, before the woods are fully clad, he seems like some bright plumaged tropical bird who has lost his way and wandered to northern climes. The summer is passed among the higher branches in coniferous forests, and in the early fall the bird returns to surroundings which seem more in keeping with its attire.

Mr. Minot describes the Blackburnian Warbler's summer song as resembling the syllables *wee-see-wee-see*, while in the spring its notes may be likened to *wee-see-wee-see, tsee, tsee, tsee*, repeated, the latter syllables being on ascending scale, the very last shrill and fine.

THE LOST MATE.

Shine ! Shine ! Shine !
Pour down your warmth, great Sun !
While we bask—we two together.

Two together !
Winds blow south, or winds blow north,
Day come white, or night come black,
Home, or rivers and mountains from home,
Singing all time, minding no time,
If we two but keep together.

Till of a sudden,
May be killed, unknown to her mate,
One forenoon the she-bird crouched not on the nest,
Nor returned that afternoon, nor the next,
Nor ever appeared again.

And thence forward, all summer, in the sound of the sea,
And at night, under the full of moon, in calmer weather,
Over the hoarse surging of the sea,
Or flitting from briar to briar by day,
I saw, I heard at intervals, the remaining one.

Blow ! blow ! blow !
Blow up, sea-winds, along Paumanok's shore !
I wait and I wait, till you blow my mate to me.

—WALT WHITMAN.



From col. F. M. Woodruff.

GOLDFINCH.
 $\frac{1}{8}$ Life-size.

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THE AMERICAN GOLDFINCH.

"Look, Mamma, look!" cried a little boy, as one day late in June my mate and I alighted on a thistle already going to seed. "Such a lovely bird! How jolly he looks, with that black velvet hat drawn over his eyes!"

"That's a Goldfinch," replied his mamma; "sometimes called the Jolly Bird, the Thistle Bird, the Wild Canary, and the Yellow Bird. He belongs to the family of Weed Warriors, and is very useful."

"He sings like a Canary," said Bobbie. "Just hear him talking to that little brown bird alongside of him."

That was my mate, you see, who is rather plain looking, so to please him I sang my best song, "*Per-chic-o-ree, per-chic-o-ree.*"

"That sounds a great deal better," said Bobbie; "because it's not sung by a little prisoner behind cage bars, I guess."

"It certainly is wilder and more joyous," said his mamma. "He is very happy just now, for he and his mate are preparing for housekeeping. Later on, he will shed his lemon-yellow coat, and then you won't be able to tell him from his mate and little ones."

"How they are gobbling up that thistle-down," cried Bobbie. "Just look!"

"Yes," said his mamma, "the fluff carries the seed, like a sail to which the seed is fastened. By eating the seed, which otherwise would be carried by the wind all over the place, these birds do a great amount of good. The down they will use to line their nests."

"How I should like to peep into their nest," said Bobbie; "just to peep, you know; not to rob it of its eggs, as boys do who are not well brought up."

My mate and I were so pleased at that, we flew off a little way, chirping and chattering as we went.

"Up and down, up and down," said Bobbie; "how prettily they fly."

"Yes," said his mamma; "that is the way you can always tell a Goldfinch when in the air. A dip and a jerk, singing as he flies."

"What other seeds do they eat, mamma?" presently asked Bobbie.

"The seeds of the dandelion, the sunflower, and wild grasses generally. In the winter, when these are not to be had, the poor little fellows have a very hard time. People with kind hearts, scatter canary seed over their lawns to the merry birds for their summer songs, and for keeping down the weeds."

THE GOLDFINCH.

ACCORDING to one intelligent observer, the Finches are, in Nature's economy, entrusted with the task of keeping the weeds in subjection, and the gay and elegant little Goldfinch is probably one of the most useful, for its food is found to consist, for the greater part, of seeds most hurtful to the works of man. "The charlock that so often chokes his cereal crops is partly kept in bounds by his vigilance, and the dock, whose rank vegetation would, if allowed to cast all its seeds, spread barrenness around, is also one of his store houses, and the rank grasses, at their seeding time, are his chief support." Another writer, whose study of this bird has been made with care, calls our American Goldfinch one of the loveliest of birds. With his elegant plumage, his rythmical, undulatory flight, his beautiful song, and his more beautiful soul, he ought to be one of the best beloved, if not one of the most famous ; but he has never yet had half his deserts. He is like the Chickadee, and yet different. He is not so extremely confiding, nor should I call him merry. But he is always cheerful, in spite of his so-called plaintive note, from which he gets one of his names, and always amiable. So far as I know, he never utters a harsh sound; even the young ones asking for food, use only smooth, musical tones. During the pairing season, his delight often becomes rapturous. To see him then, hovering and singing,—or, better still, to see the devoted pair hovering together, billing and singing,—is enough to do even a cynic good. The happy lovers ! They have never read it in a book, but it is written on their hearts,

"The gentle law that each should be
The other's heaven and harmony."

In building his nest, the Goldfinch uses much ingenuity, lichens and moss being woven so deeply into the walls that the whole surface is quite smooth. Instead of choosing the forks of a bough, this Finch likes to make its nest near the end of a horizontal branch, so that it moves about and dances up and down as the branch is swayed by the wind. It might be thought that the eggs would be shaken out by a tolerably sharp breeze, and such would indeed be the case, were they not kept in their place by the form of the nest. On examination, it will be seen to have the edge thickened and slightly turned inward, so that when the nest is tilted on one side by the swaying of the bough, the eggs are still retained within. It is lined with vegetable down, and on this soft bed repose five pretty eggs, white, tinged with blue, and diversified with small grayish purple spots.

A curious story is told of a caged Goldfinch, which in pleasant weather always hung in a window. One day, hearing strange bird voices, the owner looked up from her seat and saw a Catbird trying to induce the Finch to eat a worm it had brought for it. By dint of coaxing and feeding the wild bird, she finally induced it to come often to the window, and one day, as she sat on the porch, the Catbird brought a berry and tried to put it into her mouth. We have often seen sparrows come to the window of rooms where canaries were imprisoned, but it has uniformly been to get food and not to administer it. The Catbird certainly thus expressed its gratitude.



From col. Eugene Bliss.

CHIMNEY SWIFT.
 $\frac{2}{3}$ Life-size.

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THE CHIMNEY SWIFT.

HIEF POKAGON, of the Pottawattamie Indians, in an article in *The Osprey*, writes delightfully of the Chimney Swift, and we quote a portion of it describing a peculiar habit of the bird. The chief was a youth when he made the observation, and he writes in the second person :

"As you look, you see the head of the young chief is turning slowly around, watching something high in air above the stream ; you now begin to look in the same direction, catching glimpses every now and then, of the segment of a wild revolving ring of small unnumbered birds circling high above the trees. Their twittering notes and whizzing wings create a musical, but wild, continued roar. You now begin to realize he is determined to understand all about the feathered bees, as large as little birds, the village boy had seen. The circle continues to decrease in size, but increases the revolution until all the living, breathing ring swings over the stream in the field of your vision, and you begin to enquire what means all this mighty ingathering of such multitude of birds. The young chief in admiration claps his hands, leaping towards the stream. The twittering, whizzing roar continues to increase ; the revolving circle fast assumes a funnel shape, moving downward until the point reaches the hollow in the stub, pouring its living mass therein until the last bird dropped out of sight. Rejoicing in wonder and admiration, the youth walks round the base of the stub, listening to the rumbling roar of fluttering wings within. Night comes on, he wraps his blanket closer about him, and lies down to rest until the coming day, that he may witness the swarming multitudes pass out in early morning. But not until the

hour of midnight does he fall asleep, nor does he wake until the dawn of day, when, rising to his feet, he looks upward to the skies. One by one the stars disappear. The moon grows pale. He listens. Last night's familiar roar rings in his ears. He now beholds swarming from out the stub the living, breathing mass, forming in funnel shape, revolving like a top, rising high in air, then sweeping outward into a wide expanding ring, until the myriads of birds are scattered wide, like leaves before the whirlwind."

And then what do they do? Open the mouth of a swallow that has been flying, and turn out the mass of small flies and other insects that have been collected there. The number packed into its mouth is almost incredible, for when relieved from the constant pressure to which it is subjected, the black heap begins to swell and enlarge, until it attains nearly double its former size.

Chimney Swallow is the name usually applied to this Swift. The habit of frequenting chimneys is a recent one, and the substitution of this modern artificial home for hollow trees illustrates the readiness with which it adapts itself to a change in surroundings. In perching, they cling to the side of the chimney, using the spine-pointed tails for a support. They are most active early in the morning and late in the afternoon, when one may hear their rolling twitter as they course about overhead.

The question whether Chimney Swifts break off twigs for their nests with their feet is now being discussed by ornithologists. Many curious and interesting observations have been made, and the momentous question will no doubt in time be placed beyond peradventure.

THE LARK.

Up with me ! up with me into the clouds !
For thy song, Lark, is strong ;
Up with me ! Up with me into the clouds !
Singing, singing,
With clouds and sky about thee ringing.
Lift me, guide me till I find
That spot which seems so to thy mind.

I have walked through wildernesses dreary,
And to-day my heart is weary ;
Had I now the wings of a Fairy
Up to thee would I fly.
There is madness about thee, and joy divine
In that song of thine ;
Lift me, guide me high and high
To thy banqueting place in the sky.

—WORDSWORTH.

SHORE LARK.

IF the variety of names by which this Lark is known is any indication of its popularity, its friends must be indeed numerous.

Snow Lark, Snowbird, Prairie Lark, Sky Lark, American Sky Lark, Horned Lark, are a few of them. There is only one American Species, so far as known. It breeds in northeastern North America and Greenland, wintering in the United States. It also inhabits northern portions of the old world. The common name is derived from the tufts of black feathers over each ear, which the birds have the power of erecting at will like the so-called horns of some owls.

In the Eastern States, during the winter months, flocks of Horned Larks, varying in size from a dozen to those of a hundred or more, may be seen frequenting open plains, old fields, dry shores of bays, and the banks of rivers. According to Davie, as there are a number of geographical varieties of the Horned Lark, the greatest uncertainty has always attended their identification even by experts, and the breeding and

winter ranges of the various subspecies do not yet seem to be clearly defined.

Audubon found this species on the low, mossy and sheltered hills along the dreary coast of Labrador. In the midst of the mosses and lichens that covered the rocks the bird imbedded its nest, composed of fine grasses, arranged in a circular form and lined with the feathers of grouse and other birds.

Chapman says these Larks take wing with a sharp, whistled note, and seek fresh fields or, hesitating, finally swing about and return to near the spot from which they were flushed. They are sometimes found associated with Snowflakes. The pinkish grey coloring is very beautiful, but in the Middle and Eastern States this bird is rarely seen in his spring garb, says an observer, and his winter plumage lacks the vivid contrasts and prime color.

As a singer the Shore Lark is not to be despised, especially in his nesting haunts. He has a habit of singing as he soars in the air, after the manner of the European Skylark.



From col. F. M. Woodruff.

HORNED LARK.
¾ Life-size.

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THE YELLOW-BELLIED SAPSUCKER.

When the veins of the birch overflow in the spring,
Then I sharpen my bill and make the woods ring,
Till forth gushes—rewarding my tap, tap, tap!
The food of us Suckers—the rich, juicy sap.

—C. C. M.

ANY wild birds run up and down trees, and it seems to make little difference which end up they are temporarily, skirmishing ever to the right and left, whacking the bark with their bills, then quiet a brief moment, and again skirmishing around the tree. Sometimes an apple tree, says a recent writer, will have a perfect circle, not seldom several rings or holes round the tree—holes as large as a buck shot. The little skirmisher makes these holes, and the farmer calls it a Sapsucker. And such it is. Dr. Coues, however, says it is not a bird, handsome as it is, that you would care to have come in great numbers to your garden or orchard, for he eats the sap that leaks out through the holes he makes in the trees. When a great many holes have been bored near together, the bark loosens and peels off, so that the tree is likely to die. The Sapsucker also eats the soft inner bark which is between the rough outside bark and the hard heart-wood of the tree, which is very harmful. Nevertheless the bird does much good in destroying insects which gather to feed on the oozing sap. It sweeps them up in its tongue, which is not barbed, like that of other woodpeckers, but has a little brush on the end of it. It lacks the long, extensile tongue which enables the other species to probe the winding galleries of wood-eating larvæ.

Mr. William Brewster states that throughout the White Mountains of New Hampshire, and in most sections of Northern Maine, the Yellow-Bellied Woodpeckers outnumber all the other

species in the summer season. Their favorite nesting sites are large dead birches, and a decided preference is manifested for the vicinity of water, though some nests occur in the interior of woods. The average height of the nesting hole from the ground is about forty feet. Many of the nests are gourd-like in shape, with the ends very smoothly and evenly chiseled, the average depth being about fourteen inches. The labors of excavating the nest and those of rearing the young are shared by both sexes. While this Sapsucker is a winter resident in most portions of Illinois, and may breed sparingly in the extreme northern portion, no record of it has been found.

A walk in one of our extensive parks is nearly always rewarded by the sight of one or more of these interesting and attractive birds. They are usually so industriously engaged that they seem to give little attention to your presence, and hunt away, tapping the bole of the tree, until called elsewhere by some more promising field of operations. Before taking flight from one tree to another, they stop the insect search and gaze inquisitively toward their destination. If two of them meet, there is often a sudden stopping in the air, a twisting upward and downward, followed by a lively chase across the open to the top of a dead tree, and then a sly peeping round or over a limb, after the manner of all Woodpeckers. A rapid drumming with the bill on the tree, branch or trunk, it is said, serves for a love-song, and it has a screaming call note.

THE WARBLING VIREO.

THE Vireos are a family of singers and are more often heard than seen, but the Warbler has a much more musical voice, and of greater compass than any other member of the family. The song ripples like a brook, floating down from the leafiest tree-tops. It is not much to look at, being quite plainly dressed in contrast with the red-eyed cousin, the largest of the Vireos. In nesting time it prefers seclusion, though in the spring and mid-summer, when the little ones have flown, and nesting cares have ceased, it frequents the garden, singing in the elms and birches, and other tall trees. It rambles as well through the foliage of trees in open woodland, in parks, and in those along the banks of streams, where it diligently searches the under side of leaves and branches for insect life, "in that near-sighted way peculiar to the tribe." It is a very stoic among birds, and seems never surprised at anything, "even at the loud report of a gun, with the shot rattling about it in the branches, and, if uninjured, it will stand for a moment unconcerned, or move along, peering on every side amongst the foliage, warbling its tender, liquid strains."

The nest of this species is like that of the Red-eyed Vireo—a strong,

durable, basket-like fabric, made of bark strips, lined with fine grasses. It is suspended by the brim in slender, horizontal forks of branches, at a great height from the ground.

The Vireo is especially numerous among the elms of Boston Common, where at almost any hour of the day, from early in the month of May, until long after summer has gone, may be heard the prolonged notes of the Warbling species, which was an especial favorite of Dr. Thomas M. Brewer, author of "History of North American Birds." Its voice is not powerful, but its melody, it is said, is flute-like and tender, and its song is perhaps characterized more by its air of happy contentment, than by any other special quality. No writer on birds has grown enthusiastic on the subject, and Bradford Torrey alone among them does it scant justice, when he says this Vireo "is admirably named; there is no one of our birds that can more properly be said to warble. He keeps further from the ground than the others, and shows a strong preference for the elms of village streets, out of which his delicious music drops upon the ears of all passers underneath. How many of them hear it and thank the singer, is unhappily another question."



From col. F. M. Woodruff.

YELLOW-BELLIED SAPSUCKER.

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From col. F. M. Woodruff.

WARBLING VIREO.
Life-size.

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THE SAPSUCKER.

My Dear Young Friends:

During the long summer days, when you were enjoying golden vacation hours, I often took a peep at you from some dead tree limb or the side of a hemlock or beech. You saw me, perhaps, and were surprised at my courage; for other small birds whose voices you heard, but whose tiny bodies escaped your young eyes, appeared very timid in comparison.

But I am not so brave, after all, and know full well when my red hat is in danger. I am a good flyer, too, and can soon put a wide space between myself and certain wicked boys, who, I hope, by next vacation time will have learned so much about us that they will love every little feathered creature, and not seek to do them any harm.

Can you guess why I have such a queer name? I really ought to be popular in Illinois, for they tell me it is called the Sucker State, and that the people are proud of it. Well, I am called Sapsucker because much, if not most, of my food consists of the secret juices which flow through the entire body of the tree which you probably saw me running up and down and

around. But you saw me, you say, very often on dead branches of trees, and surely they had no sap in them? No, but if you will look closely into my actions, you will see that I destroy many insects which drill their way into the wood and deposit their eggs. In my opinion, I do far more good than harm, though you will find some people who think otherwise.

Then, again, if there is utility in beauty, surely I am a benefit to every one. One day I heard a lady say that she never saw my head pop up from behind an old stump without bursting into laughter, I looked so funny. Now I took that as a compliment; for to give pleasure to those around us, I have heard, is one of our highest duties.

Next summer when you seek the pleasant places where I dwell,—in the old deadening where the trees wear girdles around them; in the open groves, where I flit from tree to tree; in the deep wooded districts, whence one hears the tinkling ripple of running waters, you may, if good and gentle, see pop up behind a stump the red hat of

SAPSUCKER.

THE WOOD PEWEE.

The listening Dryads hushed the woods ;
The boughs were thick, and thin and few
The golden ribbons fluttering through ;
Their sun-embroidered leafy hoods
The lindens lifted to the blue ;
Only a little forest-brook
The farthest hem of silence shook ;
When in the hollow shades I heard—
Was it a spirit or a bird ?
Or, strayed from Eden, desolate,
Some Peri calling to her mate,
Whom nevermore her mate would cheer ?
“ Pe-ri ! Pe-ri ! Peer ! ”

* * * * *

To trace it in its green retreat
I sought among the boughs in vain ;
And followed still the wandering strain
So melancholy and so sweet,
The dim-eyed violets yearned with pain.

* * * * *

Long drawn and clear its closes were—
As if the hand of Music through
The sombre robe of Silence drew
A thread of golden gossamer ;
So pure a flute the fairy blue.
Like beggared princes of the wood,
In silver rags the birches stood ;
The hemlocks, lordly counselors,
Were dumb ; the sturdy servitors,
In beechen jackets patched and gray,
Seemed waiting spellbound all the day
That low, entrancing note to hear—

“ Pe-wee ! Pe-wee ! Peer ! ”

* * * * *

“ Dear bird,” I said, “ what is thy name ? ”
And thrice the mournful answer came,
So faint and far, and yet so near,
“ Pe-wee ! Pe-wee ! Peer ! ”

—J. T. TROWBRIDGE.





From col. Chi. Acad. Sciences.

WOOD PEWEE.
 $\frac{3}{4}$ Life-size.

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THE WOOD PEWEE.

I am called the Wood Pewee, but I don't always stay in the woods. If you have an orchard or a nice garden, you will hear me singing there in June.

People think I am not a happy bird, because my song seems so sad. They are very much mistaken. I am just as happy as any other little fellow dressed in feathers, and can flirt and flutter with the best of them.

Pewee! Pewee! Peer!

That is my song, and my mate thinks it is beautiful. She is never far away, and always comes at my call.

Always, did I say?

No; one day, when we were busy building our nest—which is very pretty, almost as dainty as that of our neighbor the Humming Bird—she flew away to quite a distance to find some soft lining-stuff on which to lay her eggs. I had been fetching and carrying all day the lichens to put round the nest, which was hidden among the thick leaves on the bough of a tree, and was resting by the side of it.

Pewee! Pewee! Peer!

"She will hear that," thought I, and again I sang it as loud as I could.

"I'll bring that fellow down, too," said a boy, who surely had never heard anything about our

happy, innocent lives, and as I peered down at him, he flung a large stone, which struck the bough on which I sat. Oh, how frightened I was, and how quickly I flew away!

"He has killed my little mate, I thought. Still, I called in my plaintive way, *Pewee! Pewee! Peer!*"

A faint, low cry led me to the foot of a large tree, and there on the ground lay my mate, struggling to rise and fly to me."

"I think my wing is broken," she sobbed. "Oh, that wicked, wicked boy!"

I petted her with my broad, flat beak, and after a while she was able to fly with me to our nest; but it was days and days before she was out of pain. I am sure if that boy sees my story in *BIRDS*, he will never give such an innocent *little* creature misery again.

I dress plainly, in a coat of olive and brown, and they *do* say my manners are stiff and abrupt.

But my voice is very sweet, and there is something about it which makes people say: "Dear little bird, sad little bird! what may your name be?"

Then I answer:

"Pewee! Pewee! Peer!"

THE WOOD PEWEE.

ALTHOUGH one of the most abundant species, common all over the United States, the retiring habits, plainness of dress, and quiet manners of this little bird have caused it to be comparatively little known. Dr. Brewer says that if noticed at all, it is generally confounded with the common Pewee, or Phoebe bird, though a little observation is sufficient to show how very distinct they are. The Wood Pewee will sit almost motionless for many minutes in an erect position, on some dead twig or other prominent perch, patiently watching for its insect prey. While its position is apparently so fixed, however, its eyes are constantly on the alert, and close watching will show that the bird now and then turns its head as its glance follows the course of some distant insect, while anon the feathers of the crown are raised, so as to form a sort of blunt pyramidal crest. This sentinel-like attitude of the Wood Pewee is in marked contrast to the restless motion of the Phoebe, who, even if perched, keeps its tail constantly in motion, while the bird itself seldom remains long in a fixed position. The notes of the two species (see August BIRDS) are as different as their habits, those of the Wood Pewee being peculiarly plaintive—a sort of wailing *pe-e-e-e-i, wee*, the first syllable emphasized and long drawn out, and the tone, a clear, plaintive, wiry whistle, strikingly different from the cheerful, emphatic notes of the true Pewee.

The Wood Pewee, like all of its family, is an expert catcher of insects, even the most minute, and has a remarkably quick perception of their near presence, even when the light of day has nearly gone and in the deep gloom of the thick woods. Dr. Brewer describes it as taking its station at the end of a low dead limb, from which

it darts out in quest of insects, sometimes for a single individual, which it seizes with a sharp snap of its bill; and, frequently meeting insect after insect, it keeps up a constant snapping sound as it passes on, and finally returns to its post to resume its watch. While watching it occasionally twitters, with a quivering movement of the head and tail, uttering a feeble call-note, sounding like *pee-e*.

The nest of the Wood Pewee, which is always “saddled” and securely attached to a rather stout branch, usually lichen-covered, is said to be one of the most elegant examples of bird architecture. From beneath it so much resembles a natural portion of the limb, but for its betrayal by the owner, it would seldom be discovered. It is saucer-shaped, with thick walls, and the whole exterior is a beautiful “mosaic” of green, gray, and glaucous lichen. The eggs are a rich delicate cream color, ornamented by a “wreath” round the larger end of madder-brown, purple, and lilac spots.

The Wood Pewee has many admirers, a more interesting creature to watch while feeding being hard to imagine. Often you will find him in the parks. Sitting in some quiet, shady spot, if you wait, he will soon show himself as he darts from the fence post not far away, to return to it time after time with, possibly, the very insect that has been buzzing about your face and made you miserable. His movements are so quick that even the fly cannot elude him.

And to some he is pleasant as a companion. One who loves birds once saw this Flycatcher flying in a circle and repeating breathlessly his emphatic *chebec*. “He sang on the wing, and I have never heard notes which seemed more expressive of happiness.”





From col. F. M. Woodruff.

SNOW BUNTING.
Life-size.

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THE SNOWFLAKE.

Bobbie didn't want to go to school that morning, and he looked very cheerfully out upon the cloudy sky and falling flakes of snow, pretending to shiver a little when the angry gusts of wind blew the snow sharply into people's faces.

"I guess it's better for little boy's like me to stay at home such weather as this, mamma," said he, all the while hoping the snow would soon be deep enough for him to ride down the hill on his sled.

Before his mamma could reply Bobbie gave a cry of delight which drew her at once to the window.

As from the snow clouds, on bold and rapid wing, came whirling down an immense flock of birds, white, streaked with gray and brown, chirping, calling to one another, the whole flock settling upon the open places in a field in front of Bobbie's house.

"Oh, the dear little things," said Bobbie, "they looked like little white angels dropping out of the clouds."

"Those are our winter neighbors," said his mamma, "the Snow Buntings or Snowflakes—they visit us only in winter, their summer homes being away up North near the Arctic Circle in the region of perpetual snow."

"Do they build their nests in trees?" asked Bobbie, who never tired hearing about the birds.

"There are no trees in that bleak region, only scrubby bushes," was the answer. "They build a thick, deep grassy nest, well lined with rabbit fur, or Snow Owl feathers, which they tuck under a ledge of rock or bunch of grass."

"They chirrup just like sparrows," reflected Bobbie, "can they sing?"

"They only sing when up in their Northern home. There a male Snowflake will sing as merrily as his cousin the Goldfinch."

"They look like Sparrows, too," said Bobbie, "only whiter and softer, I think."

"In the summer they are nearly all white, the brown edges having worn away, leaving them pure black and white. They are very shy and suspicious, and at the least sound you will see them all whirl aloft braving the blasts of winter like little heroes."

"Well," said Bobbie, after a while, "if those little soft white birds can go about in such weather, I guess I can too," and in a few minutes with high rubber boots, and a fur cap drawn over his ears, off trudged Bobbie like another little hero to school.

THE SNOWFLAKE.

THIS charming bird comes to us at a time when his presence may be truly welcomed and appreciated, nearly all our summer companions of the feathered tribe having departed. He might not inappropriately be named the great Snowflake, though in winter he wears a warm brown cloak, with black stripes, brown collar, and a brown and white vest. In summer, however, he is snow white, with black on the back, wings, and tail. He lives all over northern North America, and in the United States as far south as Georgia.

About the first of November, flocks of Snowflakes may be seen arriving, the males chanting a very low and somewhat broken, but very pleasant song. Some call him White Snowbird, and Snow Bunting, according to locality. The birds breed throughout the Arctic regions of both continents, the National Museum at Washington possessing nests from the most northern points of Alaska, (Point Barrow), and from Labrador, as well as from various intermediate localities.

These birds are famous seed eaters, and are rarely found in trees. They should be looked for on the ground, in the air, for they are constantly seeking new feeding grounds, in the barn-yard, or about the hay stack, where seeds are plentiful. They also nest on the ground, building a deep, grassy nest, lined with rabbit fur or feathers, under a projecting ledge of rock or thick bunch of grass. It seems curious that few persons readily distinguish them from their sparrow cousins, as they have much more white about them than any other color. Last November

multitudes of them invaded Washington Park, settling on the ground to feed, and flying up and scurrying away to successive pastures of promise. With their soft musical voices and gentle manners, they were a pleasing feature of the late Autumn landscape. "Chill November's surly blast" making "field and forest bare," had no terrors for them, but rather spread before them a feast of scattered seeds, winnowed by it from nature's ripened abundance.

The Snowflakes disappear with the melting of their namesake, the snow. They are especially numerous in snowy seasons, when flocks of sometimes a thousand are seen in the old fields and meadows. It is unusual, though it has been known to breed in the Northern States. In July, 1831, Audubon found it nesting in the White Mountains, and Dr. J. A. Allen notes a pair as breeding near Springfield, Mass. The Arctic regions are its nesting place however, and these birds were probably belated on their return migration. The Snowflake and Shorelark are so much alike in habits, that the two species occasionally associate. Ernest E. Thompson says: "Apparently the Snowflakes get but little to eat, but in reality they always find enough to keep them in health and spirits, and are as fat as butter balls. In the mid-winter, in the far north, when the thermometer showed thirty degrees below zero, and the chill blizzard was blowing on the plains, I have seen this brave little bird gleefully chasing his fellows, and pouring out, as he flew, his sweet voluble song with as much spirit as ever Skylark has in the sunniest days of June."



From col. F. M. Woodruff.

JUNCO.
Life-size.

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THE SLATE-COLORED JUNCO.

BLACK SNOWBIRD, in most of the United States and in Ontario, where it is a common resident, and White Bill, are names more often applied to this species of Sparrow than the one of Junco, by which it is known to ornithologists. It nests in the mountains of northern Pennsylvania, New York, and New England, and is a resident throughout the year in north-eastern Ohio, and in Michigan. In all probability, the Snowbird does not breed, even occasionally, anywhere within the limits of the state of Illinois, though individuals may in very rare instances be found several weeks after others have departed for the north, these having probably received some injury which prevents their migration. Prof. Forbes refers to such an instance, which came under his own observation. He saw on a tree in the edge of a wood, in the southern part of the state, an adult specimen of the Junco, and only one, which, he says, astonished him.

Mr. William L. Kells states that in Ontario this Junco selects a variety of places for nesting sites, such as the upturned roots of trees, crevices in banks, under the sides of logs and stumps, a cavity under broken sod, or in the shelter of grass or other vegetation. The nest is made of dry grasses, warmly and smoothly lined with hair. The bird generally begins to nest the first week of May, and nests with eggs are found as late as August. A nest of the Junco was found on the rafters of a barn in Connecticut.

Almost any time after the first of October, little excursion parties of Juncos may be looked for, and the custom continues all winter long. When you become acquainted with him, as you surely will, during his

visit, you will like him more and more for his cheerful habits. He will come to your back door, and present his little food petition, very merrily indeed. He is very friendly with the Chick-a-dee, and they are often seen together about in the barnyards, and he even ventures within the barn when seeds are frozen to the ground.

"The Doctor," in *Citizen Bird*, tells this pretty story of his winter pets:

"My flock of Juncos were determined to brave all weathers. First they ate the seeds of all the weeds and tall grasses that reached above the snow, then they cleaned the honeysuckles of their watery black berries. When these were nearly gone, I began to feed them every day with crumbs, and they soon grew very tame. At Christmas an ice storm came, and after that the cold was bitter indeed. For two days I did not see my birds; but on the third day, in the afternoon, when I was feeding the hens in the barnyard, a party of feeble, half-starved Juncos, hardly able to fly, settled down around me and began to pick at the chicken food. I knew at a glance that after a few hours more exposure all the poor little birds would be dead. So I shut up the hens and opened the door of the straw-barn very wide, scattered a quantity of meal and cracked corn in a line on the floor, and crept behind the door to watch. First one bird hopped in and tasted the food; he found it very good and evidently called his brothers, for in a minute they all went in and I closed the door upon them. And I slept better that night, because I knew that my birds were comfortable." The next afternoon they came back again. "I kept them at night in this way for several weeks, and one afternoon several Snowflakes came in with them. (See page 150.)

THE KINGBIRD.

IT is somewhat strange that there should be little unity of opinion concerning a bird as well known as is this charming fellow, who has at least one quality which we all admire—courage. We will quote a few of the opinions of well-known observers as to whether his other characteristics are admirable, and let the reader form his own conclusion.

John Burroughs says of him: "The exquisite of the family, and the braggart of the orchard, is the Kingbird, a bully that loves to strip the feathers off its more timid neighbors like the Bluebird, that feeds on the stingless bees of the hive, the drones, and earns the reputation of great boldness by teasing large hawks, while it gives a wide berth to the little ones." Decidedly, this classifies him with the English Sparrow. But we will hear Dr. Brewer: "The name, Kingbird, is given it on the supposition that it is superior to all other birds in the reckless courage with which it will maintain an unequal warfare. My own observations lead me to the conclusion that writers have somewhat exaggerated the quarrelsome disposition of this bird. I have never, or very rarely, known it to molest or attack any other birds than those which its own instinct prompts it to drive away in self-defense, such as Hawks, Owls, Eagles, Crows, Jays, Cuckoos, and Grackles." That Dr. Coues is a friend of the Kingbird, his language amply proves: "The Kingbird is not quarrelsome—simply very lively. He is the very picture of dash and daring in defending his home, and when he is teaching his youngsters how to fly. He is one of the best of neighbors, and a brave soldier. An officer of the guild of Sky Sweepers, also a Ground Gleaner and Tree Trapper

killing robber-flies, ants, beetles, and rose-bugs. A good friend to horses and cattle, because he kills the terrible gadflies. Eats a little fruit, but chiefly wild varieties, and only now and then a bee." If you now have any difficulty in making up your verdict, we will present the testimony of one other witness, who is, we think, an original observer, as well as a delightful writer, Bradford Torrey. He was in the country. "Almost, I could have believed myself in Eden," he says. "But, alas, even the birds themselves were long since shut out of that garden of innocence, and as I started back toward the village a Crow went hurrying past me, with a Kingbird in hot pursuit. The latter was more fortunate than usual, or more plucky, actually alighting on the Crow's back, and riding for some distance. I could not distinguish his motions—he was too far away for that—but I wished him joy of his victory, and grace to improve it to the full. For it is scandalous that a bird of the Crow's cloth should be a thief; and so, although I reckon him among my friends—in truth, *because* I do so—I am always able to take it patiently when I see him chastised for his fault."

The Kingbird is a common bird in Eastern United States, but is rare west of the Rocky Mountains. It is perhaps better known by the name of Beebird or Bee-martin. The nest is placed in an orchard or garden, or by the roadside, on a horizontal bough or in the fork at a moderate height; sometimes in the top of the tallest trees along streams. It is bulky, ragged, and loose, but well capped and brimmed, consisting of twigs, grasses, rootlets, bits of vegetable down, and wool firmly matted together, and lined with feathers, hair, etc.



From col. F. M. Woodruff.

KING BIRD:
1/2 Life-size.

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THE KINGBIRD.

You think, my young friends, because I am called Kingbird I should be large and fine looking.

Well, when you come to read about Kings in your history-book you will find that size has nothing to do with Kingliness. I have heard, indeed, that some of them were very puny little fellows, in mind as well as in body.

If it is courage that makes a king then I have the right to be called Kingbird. They say I have a reckless sort of courage, because I attack birds a great deal larger than myself.

I would not call it courage to attack anything smaller than myself, would you? A big man finds it easy to shoot a little bird in the air; and a big boy does not need to be brave to kill or cripple some poor little animal that crosses his path. He only needs to be a coward to do that!

I only attack my enemies,—the Hawks, Owls, Eagles, Crows, Jays, and Cuckoos. They would destroy my young family if I did not drive them away. Mr. Crow especially is a great thief. When my mate is on her nest I keep a sharp lookout, and when one of my enemies approaches I give a shrill cry, rise in the air, and down I pounce on his back; I do this more than once, and how I make the feathers fly!

The little hawks and crows I never attack, and yet they call me a bully. Sometimes I do go for a Song-bird or a Robin, but only when they come too near my nest. People wonder why I never attack the cunning Catbird. I'll never tell them, you may be sure!

To what family do I belong? To a large family called Flycatchers. Because some Kings are tyrants I suppose, they call me the Tyrant Flycatcher. Look for me next summer on top of a wire fence or dead twig of a tree, and watch me, every few minutes, dash into the air, seize a passing insect, and then fly back to the same perch again.

Any other names? Yes, some folks call me the Bee Bird or Bee Martin. Once in awhile I change my diet and do snap up a bee! but it is always a drone, not a honey-bee. Some ill-natured people say I choose the drones because they can't sting, and not because they are tramp bees and will not work.

Sing? Yes, when my mate is on her nest I please her with a soft pretty song, at other times my call-note is a piercing-Kyrie-K-y-rie! I live with you only in the summer. When September comes I fly away to a warmer climate.

SUMMARY.

Page 123.

BLACKBURNIAN WARBLER.—*Dendroica blackburniae*.

RANGE—Eastern North America; breeds from northern Minnesota and southern Maine northward to Labrador and southward along the Alleghanies to South Carolina; winters in the tropics.

NEST—Of fine twigs and grasses, lined with grasses and tendrils, in coniferous trees, ten to forty feet up.

EGGS—Four, grayish white or bluish white, distinctly and obscurely spotted, speckled, and blotched with cinnamon brown or olive brown.

Page 128.

AMERICAN GOLDFINCH.—*Spinus tristis*. Other names: "Yellow-bird," "Thistle-bird."

RANGE—Eastern North America; breeds from South Carolina to southern Labrador; winters from the northern United States to the Gulf.

NEST—Externally, of fine grasses, strips of bark and moss, thickly lined with thistle down; in trees or bushes, five to thirty feet up.

EGGS—Three to six, pale bluish white.

Page 131.

CHIMNEY SWIFT.—*Chætura pelagica*. Other name: "Chimney Swallow."

RANGE—Eastern North America; breeds from Florida to Labrador; winters in Central America.

NEST—A bracket-like basket of dead twigs glued together with saliva, attached to the wall of a chimney, generally about ten feet from the top, by the gummy secretions of the bird's salivary glands.

EGGS—Four to six, white.

Page 135.

HORNED LARK.—*Otocoris alpestris*. Other name: "Shore Lark."

RANGE—Breeds in northern Europe, Greenland, Newfoundland, Labrador, and Hudson Bay region; southward in winter into eastern United States to about latitude 35°

NEST—Of grasses, on the ground.

EGGS—Three or four, pale bluish or greenish white, minutely and evenly speckled with pale grayish brown.

Page 140.

SAPSUCKER, YELLOW-BELLIED.—*Sphyrapicus varius*.

RANGE—Eastern North America; breeds from Massachusetts northward, and winters from Virginia to Central America.

NEST—About forty feet from the ground.

EGGS—Five to seven.

Page 141.

WARBLING VIREO.—*Vireo gilvus*. Other name: "Yellow-throated Vireo."

RANGE—North America; breeds as far north as the Hudson Bay region; winters in the tropics.

NEST—Pensile, of grasses and plant fibres, firmly and smoothly interwoven, lined with fine grasses, suspended from a forked branch eight to forty feet up.

EGGS—Three or four, white, with a few specks or spots of black amber, or rufous brown, chiefly about the larger end.

Page 146.

WOOD PEWEE.—*Contopus Virens*.

RANGE—Eastern North America; breeds from Florida to Newfoundland; winters in Central America.

NEST—Compact and symmetrical, of fine grasses, rootlets and moss, thickly covered with lichens, saddled on a limb, twenty to forty feet up.

EGGS—Three or four, white, with a wreath of distinct and obscure markings about the larger end.

Page 150.

SNOWFLAKE.—*Plectrophenax nivalis*. Other name: "Snow Bunting."

RANGE—Northern parts of northern hemisphere, breeding in the arctic regions; in North America, south in Winter into the northern United States, irregularly to Georgia, southern Illinois, and Kansas.

NEST—Of grasses, rootlets, and moss, lined with finer grasses and feathers, on the ground.

EGGS—Four to seven, pale bluish white, thinly marked with amber or heavily spotted or washed with rufous-brown.

Page 153.

JUNCO.—*Junco hyemalis*. Other name: "Snowbird."

RANGE—North America; breeds from northern Minnesota to northern New York and southward along the summits of the Alleghanies to Virginia; winters southward to the Gulf States.

NEST—Of grasses, moss, and rootlets, lined with fine grasses and long hairs, on or near the ground.

EGGS—Four or five, white or bluish white, finely or evenly speckled or spotted, sometimes heavily blotched at the larger end with rufous-brown.

Page 158.

KINGBIRD.—*Tyrannus tyrannus*.

RANGE—North America north to New Brunswick and Manitoba; rare west of the Rocky Mountains; winters in Central and South America.

NEST—Compact and symmetrical, of weed-stocks, grasses, and moss, lined with plant down, fine grasses, and rootlets, generally at the end of a branch fifteen to twenty-five feet from the ground.

EGGS—Three to five, white, spotted with amber.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

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No. 5.

JOHN JAMES AUDUBON.

JOHN JAMES AUDUBON has always been a favorite with the writer, for the invincibility of his love of Nature and of birds is only equaled by the spontaneous freshness of his style, springing from an affectionate and joyous nature. Recently there was found by accident, in an old calf-skin bound volume, an autobiography of the naturalist. It is entitled "Audubon's Story of his Youth," and would make a very pretty book. As introductory to the diaries and ornithological biographies of the birds, it would be very useful.

Two or three incidents in the life of this fascinating character are interesting as showing the influence of the accidental in ultimate achievement.

"One incident," he says, "which is as perfect in my memory as if it had occurred this very day, I have thought thousands of times since, and will now put on paper as one of the curious things which perhaps did lead me in after times to love birds, and to finally study them with pleasure infinite. My mother had several beautiful parrots, and some monkeys; one of the latter was a full-grown male of a very large species. One morning, while the servants were engaged in arranging the room I was in, 'Pretty Polly' asking for her breakfast as usual, '*Du pain au lait pour le perroquet Mignonne,*' (bread and milk for the parrot Mignonne,) the man of the woods

probably thought the bird presuming upon his rights in the scale of nature; be this as it may, he certainly showed his supremacy in strength over the denizen of the air, for, walking deliberately and uprightly toward the poor bird, he at once killed it, with unnatural composure. The sensations of my infant heart at this cruel sight were agony to me. I prayed the servant to beat the monkey, but he, who for some reason, preferred the monkey to the parrot, refused. I uttered long and piercing cries, my mother rushed into the room; I was tranquilized; the monkey was forever afterward chained, and Mignonne buried with all the pomp of a cherished lost one. This made, as I have said, a very deep impression on my youthful mind."

In consequence of the long absences of his father, who was an admiral in the French navy, the young naturalist's education was neglected, his mother suffering him to do much as he pleased, and it was not to be wondered at, as he says, that instead of applying closely to his studies, he preferred associating with boys of his own age and disposition, who were more fond of going in search of bird's nests, fishing, or shooting, than of better studies. Thus almost every day, instead of going to school, he usually made for the fields where he spent the day, returning with his little basket filled with what he called curiosities, such as birds' nests, birds'

eggs, curious lichens, flowers of all sorts, and even pebbles gathered along the shore of some rivulet. Nevertheless, he did study drawing and music, for which he had some talent. His subsequent study of drawing under the celebrated David, richly equipped him for a work which he did not know was ever to be his, and enabled him to commence a series of drawings of birds of France, which he continued until he had upwards of two hundred completed. "All bad enough," he says, "yet they were representations of birds, and I felt pleased with them." Before sailing for France, he had begun a series of drawings of the birds of America, and had also begun a study of their habits. His efforts were commended by one of his friends, who assured him the time might come when he should be a great American naturalist, which had such weight with him that he felt a certain degree of pride in the words, even then, when he was about eighteen years of age.

"The store at Louisville went on prosperously, when I attended to it; but birds were birds then as now, and my thoughts were ever and anon turning toward them as the objects of my greatest delight. I shot, I drew, I looked on nature only; my days were happy beyond human conception, and beyond this I really cared not." [How like Agassiz, who said he had not time to make money.] As he could not bear to give the attention required by his business, his business abandoned him. "Indeed, I never thought of business beyond the ever-engaging journeys which I was in the habit of taking to Philadelphia or New York, to purchase goods; those journeys I greatly enjoyed, as they afforded me ample means to study birds and their habits as I traveled through the beautiful, the darling forests of Ohio, Kentucky, and Pennsylvania." Poor fellow, how many ups and downs he had! He lost every-

thing and became burdened with debt. But he did not despair for had he not a talent for drawing? He at once undertook to take portraits of the human head divine in black chalk, and thanks to his master, David, succeeded admirably. He established a large drawing school at Cincinnati, and formed an engagement to stuff birds for the museum there at a large salary.

"One of the most extraordinary things among all these adverse circumstances" he adds, "was, that I never for a day give up listening to the songs of our birds, or watching their peculiar habits, or delineating them in the best way I could; nay, during my deepest troubles, I frequently would wrench myself from the persons around me and retire to some secluded part of our noble forests; and many a time, at the sound of the wood-thrushes' melodies, have I fallen on my knees and there prayed earnestly to our God. This never failed to bring me the most valuable of thoughts, and always comfort, and it was often necessary for me to exert my will and compel myself to return to my fellow-beings."

Do you not fancy that Audubon was himself a *rara avis* and worthy of admiration and study?

Such a man, in the language of a contemporary, should have a monument in the old Creole country in which he was born, and whose birds inspired his childish visions. It should be the most beautiful work possible to the sculptor's art, portraying Audubon in the garb he wore when he was proud and happy to be called the "American Woodman," and at his feet should stand the Eagle which he named the "Bird of Washington," and near should perch the Mocking Bird, as once, in his description, it flew and fluttered and sang to the mind's eye and ear from the pages of the old reading book. C. C. MARBLE.



From col. F. M. Woodruff.

SUMMER TANAGER
 $\frac{1}{2}$ Life-size.

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THE SUMMER TANAGER.

THE TANAGERS are birds of such uncommon beauty that when we have taken the pictures of the entire family the group will be a notable one and will add attractiveness to the portfolio. [See Vol. I, pp. 31 and 215.] This specimen is also called the Summer Red-bird or Rose Tanager, and is found pretty generally distributed over the United States during the summer months, wintering in Cuba, Central America, and northern South America. As will be seen, the adult male is a plain vermilion red. The plumage of the female is less attractive. In habits this species resembles the Scarlet Tanager, perhaps the most brilliant of the group, but is not so retiring, frequenting open groves and often visiting towns and cities.

The nesting season of this charming bird extends to the latter part of July, but varies with the latitude and season. Bark strips and leaves interwoven with various vegetable substances compose the nest, which is usually built on a horizontal or drooping branch, near its extremity and situated at the edge of a grove near the roadside. Davie says: "All the nests of this species which I have seen collected in Ohio are very thin and frail structures; so thin that the eggs may often be seen from beneath. A nest sent me from Lee county, Texas, is compactly built of a cottony weed, a few stems of Spanish moss, and lined with fine grass stems." Mr. L. O. Pindar states that nests found in Kentucky are compactly built, but not very thickly lined. The eggs are beautiful, being a bright, light emerald green, spotted,

dotted, and blotched with various shades of lilac, brownish-purple, and dark brown.

Chapman says the Summer Tanager may be easily identified, not alone by its color but by its unique call-note, a clearly enunciated *chicky, tucky, tuck*. Its song bears a general resemblance to that of the Scarlet, but to some ears is much sweeter, better sustained, and more musical. It equals in strength, according to one authority, that of the Robin, but is uttered more hurriedly, is more "wiry," and much more continued.

The Summer Tanager is to a greater or less extent known to farmers as the Red Bee-Bird. Its food consists largely of hornets, wasps, and bees.

The male of this species requires several years to attain the full plumage. Immature individuals, it is said, show a mixture of red and yellow in relative proportions according to age. The female has more red than the male, but the tint is peculiar, a dull Chinese orange, instead of a pure rosy vermilion, as in the male.

An interesting study for many of our readers during the summer months when the Tanagers are gay in their full plumage, would be to seek out, with BIRDS in hand, the most attractive denizens of the groves, identifying and observing them in their haunts until the entire group, of which five species are represented in the United States, is made familiar. When we remember that there are about three hundred and eighty known species of Tanagers in Tropical America, it would seem a light task to acquaint oneself with the small family at home.

THE AMERICAN WHITE-FRONTED GOOSE.

"As stupid as a Goose!"

Yes, I know that is the way our family is usually spoken of. But then I'm not a tame Goose, you know. We wild fellows think we know a little more than the one which waddles about the duck-pond in your back yard.

He sticks to one old place all the time. Waddles and talks and looks the same year after year. We migratory birds, on the other hand, fly from place to place. Our summers are passed here, our winters there; so that we pick up a thing or two the common Goose never dreams of.

"The laughing Goose!"

Yes, some people call me that. I don't know why, unless my *Honk, honk, honk!* sounds like a laugh. Perhaps, though, it is because the look about my mouth is so pleasant.

Did you ever see a flock of us in motion, in October or November, going to our winter home?

Ah, that is a sight! When the time comes for us to start, we form ourselves into a figure like this $\succ \bullet$ a big gander taking the lead where the dot is. Such a *honk, honk, honking* you never heard. People who have heard us, and seen us, say it sounds like a great army over-head.

Where do we live in summer, and what do we eat?

You will find us throughout the whole of North America, but in greater numbers on the Pacific coast. The fresh-water lakes are our favorite resorts. We visit the wheat fields and corn fields, nibbling the young, tender blades and feeding on the scattered grain. The farmers don't like it a bit, but we don't care. That is the reason our flesh tastes so sweet.

And tough!

My, how you talk! It is only we old fellows that are tough, we fellows over a year old. But of course a great many people don't know that, or don't care.

Why, I once heard of a gander that had waddled around a barn-yard for five long years. Thanksgiving Day arrived, and they roasted him for dinner.

Think of eating an old, *old* friend like that!

Where do we build our nests?

Away up north, in Alaska, and on the islands of the Arctic Sea. We make them of hay, feathers, and down, building them in hollow places on the ground.

How many eggs?

Six. I am very good to my mate, and an affectionate father.



From col. Chl. Acad. Sciences.

WHITE-FRONTED GOOSE.
 $\frac{1}{4}$ Life-size.

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THE AMERICAN WHITE-FRONTED GOOSE.

WHITE - FRONTED or Laughing Geese are found in considerable numbers on the prairies of the Mississippi Valley. They are called Prairie Brant by market-men and gunners. Though not abundant on the Atlantic seaboard, vast flocks may be seen in the autumn months on the Pacific Slope. In Oregon and northern California some remain all winter, though the greater number go farther south. They appear to prefer the grassy patches along streams flowing into the ocean, or the tide-water flats so abundant in Oregon and Washington, where the Speckle-bellies, as they are called, feed in company with the Snow Geese. The nesting place of this favorite species is in the wooded districts of Alaska and along the Yukon river. No nest is formed, from seven to ten eggs being laid in a depression in the sand.

It is said that notwithstanding all references to their ungainly movement and doltish intellect, the Wild Goose, of which the White-fronted is one of the most interesting, is held in high estimation by the sportsman, and even he, if keen of observation, will learn from it many things that will entitle the species to advancement in the mental grade, and prove the truth of a very old adage, that you cannot judge of things by outward appearance. A goose, waddling around the barnyard, may not present a very graceful appearance, nor seem endowed with much intelligence, yet the ungainly creature, when in its natural state, has an ease of motion in flight which will compare with that of any of the feathered tribe, and shows a knowledge of the

means of defense, and of escaping the attacks of its enemies, that few possess. There is probably no bird more cautious, vigilant, and fearful at danger than this. Should their suspicion be aroused, they rise upward slowly in a dense cloud of white, and sound their alarm notes, but they may not go over fifty yards before they alight again, so that the amusement of watching them may be continued without much toil or inconvenience.

The White-fronted Goose visits Illinois only during its migrations, coming some time in October or early in November, and returning in March or April. During its sojourn there it frequents chiefly open prairies, or wheat fields, where it nibbles the young and tender blades, and corn-fields, where it feeds upon the scattered grains. In California, Ridgway says, it is so numerous in winter as to be very destructive of the growing wheat crop, and it is said that in the Sacramento and San Joaquin valleys, farmers often find it necessary to employ men by the month to hunt and drive them from the fields. This is most successfully accomplished by means of brush hiding places, or "blinds," or by approaching the flocks on horseback by the side of an ox which has been trained for the purpose.

The White-fronted Goose is greatly esteemed for the excellent quality of its flesh, which, by those who have learned to appreciate it, is generally considered superior to that of any other species. While the cruel pursuit of the bird, merely for purpose of sport ought not to be continued, appreciation of its value as food may well be encouraged.

THE TURNSTONE.

THIS small plover-like bird is found on the sea-coasts of nearly all countries ; in America, from Greenland and Alaska to Chili and Brazil ; more or less common in the interior along the shores of the Great Lakes and larger rivers.

It is generally found in company with flocks of the smaller species of Sandpipers, its boldly marked plumage contrasting with surroundings, while the Sandpipers mingle with the sands and unless revealed by some abrupt movement can hardly be seen at a little distance.

The name Turnstone has been applied to this bird on account of its curious habit of dexterously inserting its bill beneath stones and pebbles along the shore in quest of food, overturning them in search of the insects or prey of any kind which may be lurking beneath. It is found on smooth, sandy beaches, though more commonly about the base of rocky cliffs and cones. The eggs of horseshoe crabs are its particular delight.

In the nesting season the Turnstone is widely distributed throughout the northern portions of both continents, and wanders southward along the sea-

coasts of all countries. In America it breeds commonly in the Barren Lands of the Arctic coasts and the Anderson River districts, on the Islands of Franklin and Liverpool bays, nesting in July. In the Hudson's Bay country the eggs are laid in June. The nest is a hollow scratched in the earth, and is lined with bits of grass.

The Turnstone is known by various names: "Brant Bird," "Bead Bird," "Horse-foot-Snipe," "Sand-runner," "Calico-back," "Chicarie" and "Chickling." The two latter names have reference to its rasping notes, "Calico-back," to the variegated plumage of the upper parts.

In summer the adults are oddly pied above with black, white, brown, and chestnut-red, but the red is totally wanting in winter. They differ from the true Plovers in the well developed hind-toe, and the strong claws, but chiefly in the more robust feet, without trace of web between the toes.

The eggs are greenish-drab in color, spotted, blotched, and dotted irregularly and thickly with yellowish and umber brown. The eggs are two or four, abruptly pyriform in shape.

SNOWBIRDS.

Along the narrow sandy height
I watch them swiftly come and go,
Or round the leafless wood,
Like flurries of wind-driven snow,
Revolving in perpetual flight,
A changing multitude.

Nearer and nearer still they sway,
And, scattering in a circled sweep,
Rush down without a sound ;
And now I see them peer and peep,
Across yon level bleak and gray,
Searching the frozen ground,—

Until a little wind upheaves,
And makes a sudden rustling there,
And then they drop their play,
Flash up into the sunless air,
And like a flight of silver leaves
Swirl round and sweep away.

ARCHIBALD LAMPMAN.



From col. F. M. Woodruff.

TURNSTONE.
 $\frac{1}{2}$ Life-size.

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BIRDS OF PASSAGE.

Black shadows fall
From the lindens tall,
That lift aloft their massive wall
 Against the southern sky ;

And from the realms
Of the shadowy elms,
A tide-like darkness overwhelms
 The fields that round us lie.

But the night is fair
And everywhere
A warm, soft vapor fills the air
 And distant sounds seem near ;

And above, in the light
Of the star-lit night,
Swift birds of passage wing their flight
 Through the dewy atmosphere.

I hear the beat
Of their pinions fleet,
As from the land of snow and sleet
 They seek a southern lea.

I hear the cry
Of their voices high
Falling dreamily through the sky,
 But their forms I cannot see.

—LONGFELLOW.

THE BELTED PIPING PLOVER.

IN the Missouri river region and in contiguous parts of the interior of the United States, the Belted Piping Plover is a common summer resident, and is found along the shores of the great lakes, breeding on the flat, pebbly beach between the sand dunes and shore. It is the second of the ring-necked Plovers, and arrives in April in scattering flocks, which separate into pairs a month later. It strays at times into the interior, and has been known to breed on the borders of ponds many miles from the coast. In New England, however, it seldom wanders far from the shore, and prefers sand islands near the main land for its nesting haunts. Nelson says, that some thirty pairs, which were breeding along the beach at Waukegan, within a space of two miles, successfully concealed their nests, for which he made diligent search, although the birds were continually circling about or standing at a short distance, uttering an occasional note of alarm.

These birds have a soft, low, piping note, which they utter not only upon the wing, but occasionally as they run about upon the ground, and, during the early nesting season, a peculiar, loud, prolonged, musical call, that readily attracts attention. In other respects, their habits are not noticeably differed from the Semi-palmated. (See July BIRDS, p. 8.)

Their nests are without lining, a mere depression in the sand. The eggs are usually four, light gray to

creamy buff, finely and rather sparsely speckled or dotted with blackish brown and purplish gray.

The female Belted Piping Plover is similar to the male, but with the dark colors lighter and less in extent. The young have no black band in front, while the collar around the neck is ashy brown.

These interesting and valuable game birds are found associated with various beach birds and Sand-Pipers, and they become exceedingly fat during the latter part of the summer.

— All the Plovers have a singular habit when alighting on the ground in the nesting time; they drop their wings, stand with their legs half bent, and tremble as if unable to support their bodies. In this absurd position they will stand, according to a well-known observer, for several minutes, uttering a curious sound, and then seem to balance themselves with great difficulty. This singular manœuvre is no doubt intended to produce a belief that they may be easily caught, and thus turn the attention of the egg-gatherer from the pursuit of the eggs to themselves, their eggs being recognized the world over, as a great delicacy.

The Plover utters a piping sound
While on the wing or on the ground;
All a tremble it drops its wings,
And, with legs half bent, it sings:
"My nest is near, come take the eggs,
And take me too,—I'm off my legs."
In vain men search with eager eyes,
No nest is found, the Plover flies!

—C. C. M



From col. F. M. Woodruff.

BELTED PIPING PLOVER.
 $\frac{7}{8}$ Life-size.

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THE WILD TURKEY.

IT has been observed that when the Turkey makes its appearance on table all conversation should for the moment be suspended. That it is eaten in silence on some occasions may be inferred from the following anecdote: A certain judge of Avignon, famous for his love of the glorious bird, which the American people have wisely selected for the celebration of Thanksgiving Day, said to a friend: "We have just been dining on a superb Turkey. It was excellent. Stuffed with truffles to the very throat—tender, delicate, filled with perfume! We left nothing but the bones!" "How many were there of you?" asked his friend. "Two," replied the judge, "the Turkey—and myself!" The reason, no doubt, why this brilliant bird, which so much resembles the domestic Turkey, is now almost extinct. It was formerly a resident of New England, and is still found to some extent as far north-west as the Missouri River and south-west as Texas. In Ohio it was formerly an abundant resident. Dr. Kirtland (1850) mentions the time when Wild Turkeys were more common than tame ones are now.

The nests of this bird are very difficult to discover, as they are made on the ground, midst tall, thick weeds or tangled briars. The female will not leave the nest until almost trodden upon. It is stated that when the eggs are once touched, she will abandon her nest.

The Turkey became known to Europeans almost immediately upon the discovery of America by the Spaniards in 1518, and it is probable that it is distinctively an American bird. In its wild state, its plumage, as in the case of the Honduras Turkey, grows more lustrous and magnificent as the family extends southward.

The "Gobblers," as the males are called, associate in parties of ten to one hundred, seeking their food apart from the females, which wander singly with their young or in troops with other hens and their families, sometimes to the number of seventy or eighty. They travel on foot, unless disturbed by the hunter or a river compels them to take wing. It is said that when about to cross a river, they select a high eminence from which to start, that their flight may be more sure, and in such a position they sometimes remain for a day or more, as if in consultation. On such occasions the males gobble vociferously, strutting about pompously as if to animate their companions. At the signal note of their leader, they wing their way to the opposite shore.

The Wild Turkey feeds on many kinds of berries, fruits, and grasses. Beetles, tadpoles, young frogs, and lizards are sometimes found in its crop. When the Turkeys reach their destination, they disperse in flocks, devouring the mast as they proceed.

Pairing time begins in March. The sexes roost apart, but at no great distance, so that when the female utters a call, every male within hearing responds, rolling note after note in rapid succession, in a voice resembling that of the tame Turkey when he hears any unusual noise. Where the Turkeys are numerous, the woods from one end to the other, sometimes for many miles, resound with these voices of wooing.

The specimen of the Wild Turkey presented in this number of BIRDS is of extraordinary size and beauty, and has been much admired. The day is not far distant when a living specimen of this noble bird will be sought for in vain in the United States.

THE CERULEAN WARBLER.

THIS beautiful little sky-blue feathered creature is well named Azure Warbler, or again White-throated Blue Warbler, and is the most abundant of the genus here.

It is a bird of the wood, everywhere associated with the beautiful tall forests of the more northern counties of western New York, sometimes found in the open woods of pasture-lands, and quite partial to hardwood trees. In its flitting motion in search of insect-prey, and in the jerking curves of its more prolonged flight, as also in its structure, it is a genuine Wood Warbler and keeps for the most part to what Thoreau calls the "upper story" of its sylvan domain.

All Warblers, it has been said, depend upon their markings rather than song for their identity, which renders the majority of the tribe of greater interest to the scientist than to the novice. Until you have named four or five of the commonest species as landmarks, you will be considerably confused.

Audubon described the song of the Cerulean Warbler as "extremely sweet and mellow," whereas it is a modest little strain, says Chapman, or trill, divided into syllables like *zee, zee, zee, ze-ee-ee-eep*, or according to another observer, *rheet, rheet, rheet, rheet, riddi, idi, e-e-e-e-ee*; beginning with several soft warbling notes and ending in a rather prolonged but quite musical squeak. The latter and more rapid part of the strain, which is given in the upward slide, approaches an insect quality of tone which is more or less peculiar to all true Warblers, a song so common as to be a universal characteristic of our tall forests.

It is not strange that the nest of this species has been so seldom discovered, even where the bird is very abund-

ant during the breeding season. It is built in the higher horizontal branches of forest trees, always out some distance from the trunk, and ranging from twenty to fifty feet above the ground. One described by Dr. Brewer, found in Ontario, near Niagara Falls, was built in a large oak tree at the height of fifty or more feet from the ground. It was placed horizontally on the upper surface of a slender limb between two small twigs; and the branch on which it was thus saddled was only an inch and a half in thickness, being nine feet from the trunk of the tree. The abandoned home was secured with great difficulty.

The nest is a rather slender fabric, somewhat similar to the nest of the Redstart, and quite small for the bird, consisting chiefly of a strong rim firmly woven of strips of fine bark, stems of grasses, and pine needles, bound round with flaxen fibres of plants and wool. Around the base a few bits of hornets' nests, mosses, and lichens are loosely fastened. The nest within is furnished with fine stems and needles, the flooring very thin and slight.

The bird is shy when started from the nest, and has a sharp chipping alarm-note common to the family.

The Cerulean Warbler is found in the Eastern States, but is more numerous west of the Allegheny mountains, and throughout the heavily wooded districts of the Mississippi valley. In winter it migrates to Central America and Cuba. The Warblers are of unfailing interest to the lover of bird life. Apart from the beauty of the birds themselves, with their perpetually contrasting colors among the green leaves, their pretty ways furnish to the silent watcher an ever changing spectacle of the innocent life in the tree-tops.

THE WILD TURKEY.

I thought my picture would appear in this number of BIRDS. What would Thanksgiving be without a Turkey, I'd like to know.

The editor says that I am a bird of ex-traor-di-na-ry size and beauty. That word is as big as I am, but by spelling it, I guess you will understand.

I look as proud as a peacock, don't I? Well, I am just as proud. You ought to see me strut, and hear me talk when the hen-turkeys are around. Why, sometimes when there is a large troop of us in the woods you can hear us *gobble, gobble, gobble*, for many miles. We are so fond of talking to each other.

That is when we are about to set up housekeeping, you think.

Yes, in March and April. After the nests are made, and the little turkeys hatched out, we big, handsome fellows go off to ourselves. The hen-turkeys, with their young broods, do the same.

Sometimes there are as many as a hundred in our troop and seventy or eighty in theirs. We

travel on foot, picking up food as we go, till we meet a man with a gun, or come to a wide river.

Then we have to fly.

In a flock? Oh, yes. We choose some high place from which to get a good start. There we all stay, sometimes a day or two, strutting about and talking big. It is *gobble, gobble, gobble*, from morning till night. Just like one of your conventions, you know. After awhile our leader gives the signal and off we all fly to the opposite shore.

Did you ever see one of our nests? No? Well, they are not easily seen, though they are made on the ground. You see, we are cunning and build them among tall, thick weeds and tangled briars.

I hope, if you ever come across one, you will not touch it, because my mate would never return to it again, if you did.

What do we eat?

Berries, fruit and grasses, beetles, tadpoles, frogs and lizards. In fact anything we consider good.

THE YELLOW-BILLED TROPIC BIRD.

IN appearance this bird resembles a large Tern (see Vol. 1, page 103), and its habits are similar to those of the Terns. Inter-tropical, it is of a wandering disposition, breeding on the islands of mid-ocean thousands of miles apart. It is noted for its elegant, airy, and long-protracted flight. Davie says that on Bourbon, Mauritius and other islands east and south of Madagascar it breeds in the crevices of the rocks of inaccessible cliffs, and in hollow trees. In the Bermuda Islands it nests about the first of May in holes in high rocky places along the shores. Here its favorite resorts are the small islands of Great Sound, Castle Harbor, and Harrington Sound. The Phaeton, as it is felicitously called, nests in the Bahamas in holes in the perpendicular faces of cliffs and on the flat surfaces of rocks. A single egg is laid, which

has a ground-color of purplish brownish white, covered in some specimens almost over the entire surface with fine reddish chocolate-colored spots.

These species compose the small but distinct family of tropic birds and are found throughout the tropical and sub-tropical regions of the world. Long journeys are made by them across the open sea, their flight when emigrating being strong, rapid, and direct, and immense distances are covered by them as they course undismayed by wind or storm. In feeding, Chapin says, they course over the water, beating back and forth at a height of about forty feet, and their long willowly tail-feathers add greatly to the grace and beauty of their appearance when on the wing. They are of rare and probably accidental occurrence on our coasts.

The Songs of Nature never cease,
Her players sue not for release
In nearer fields, on hills afar,
Attendant her musicians are :
From water brook or forest tree,
For aye comes gentle melody,
The very air is music blent—
An universal instrument.

—JOHN VANCE CHENEY.



From col. F. M. Woodruff.

YELLOW-BILLED TROPIC BIRD.
 $\frac{1}{4}$ Life-size.

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THE YELLOW-BILLED TROPIC BIRD.

The people who make a study of birds say that I look like a large Tern, and that my habits are like his.

I don't know whether that is so, I am sure, for I have no acquaintance with that bird, but you little folks can turn to your March number of *BIRDS* and see for yourselves if it is true.

For my part, I think I am the prettier of the two on account of my long, willowy tail feathers. They add greatly, it is said, to the grace and beauty of my appearance when on the wing. Then, the color of my coat is much more beautiful than his, I think, don't you think so, too?

We are not so common as the Terns, either, for they are very numerous. There are only three species of our family, so we consider ourselves quite distinct.

What are we noted for?

Well, principally for our long distance flights across the sea, elegant and airy, as the writers say of us. Maybe that is the reason they call us the Phaeton sometimes.

Do we go north in the summer as so many other birds do?

Ugh! You make me shudder. No, indeed! We never go farther north than Florida. Our home, or where we build our nests, is in the tropical and sub-tropical regions, where the weather is very warm, you know.

We are great wanderers and build our nests on islands, way out in the ocean many thousands of miles apart.

In trees?

Oh, no, but in any hole we see in the face of a great rock or cliff, and sometimes right on the top of a rock.

How many eggs?

Only one. That is the reason, you see, that our family remains small.

Sing?

Oh, my, no! We are not singing birds. We have a call-note, though harsh and guttural, which sounds like *tip, tip, tip*.

THE EUROPEAN KINGFISHER.

RARELY indeed is this charming bird now found in England, where formerly it could be seen darting hither and thither in most frequented places. Of late years, according to Dixon, he has been persecuted so greatly, partly by the collector, who never fails to secure the brilliant creature for his cabinet at every opportunity, and partly by those who have an inherent love for destroying every living object around them. Game-keepers, too, are up in arms against him, because of his inordinate love of preying on the finny tribe. Where the Kingfisher now is seen is in the most secluded places, the author adds, where the trout streams murmur through the silent woods, but seldom trod by the foot of man; or in the wooded gullies down which the stream from the mountains far above rushes and tumbles over the huge rocks, or lies in pools smooth as the finest mirror.

The Kingfisher is comparatively a silent bird, though he sometimes utters a few harsh notes as he flies swift as a meteor through the wooded glades. You not unfrequently flush the Kingfisher from the holes in the banks, and amongst the brambles skirting the stream. He roosts at night in holes, usually the nesting cavity. Sometimes he will alight on stumps and branches projecting from the water, and sit quiet and motionless, but on your approach he darts quickly away, often uttering a feeble *seep, seep*, as he goes.

The habits of the English Kingfisher are identical with those of the American, though the former is the more brilliant bird in plumage. (See

BIRDS, Vol. I, p. 62.) The ancients had a very absurd idea as to its nesting habits. They believed that the bird built a floating nest, and whenever the old bird and her charge were drifted by the winds, as they floated over the briny deep, the sea remained calm. He was, therefore, to the ancient mariner, a bird held sacred in the extreme. Even now these absurd superstitions have not wholly disappeared. For instance, the nest is said to be made of the fish bones ejected by the bird, while the real facts are, that they not only nest but roost in holes, and it must follow that vast quantities of rejected fish bones accumulate, and on these the eggs are of necessity laid.

These eggs are very beautiful objects, being of a deep pinkish hue, usually six in number.

The food of the Kingfisher is not composed entirely of fish, the remains of fresh-water shrimps being found in their stomachs, and doubtless other animals inhabiting the waters are from time to time devoured.

The English Kingfisher, says Dixon, remains throughout the year, but numbers perish when the native streams are frozen. There is, perhaps, not a bird in all the ranks of the feathered gems of equatorial regions, be it ever so fair, the Humming-bird excepted, that can boast a garb so lovely as this little creature of the northland. Naturalists assert that the sun has something to do with the brilliant colors of the birds and insects of the tropics, but certainly, the Kingfisher is an exception of the highest kind. Alas, that he has no song to inspire the muse of some English bard!



From col. Chi. Acad. Sciences.

EUROPEAN KINGFISHER.
9/10 Life-size.

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THE EUROPEAN KINGFISHER.

Little Folks :

I shouldn't have liked it one bit if my picture had been left out of this beautiful book. My cousin, the American Kingfisher, had his in the February number, and I find he had a good deal to say about himself in his letter, too.

Fine feathers make fine birds, they say. Well, if that is true, I must be a very fine bird, for surely my feathers are gay enough to please anybody—I think.

To see me in all my beauty, you must seek me in my native wood. I look perfectly gorgeous there, flitting from tree to tree. Or maybe you would rather see me sitting on a stump, gazing down into the clear pool which looks like a mirror.

“Oh, what a vain bird !” you would say ; “see him looking at himself in the water ;” when all the time I had my eye on a fine trout which I intended to catch for my dinner.

Well, though I wear a brighter dress than my American cousin, our habits are pretty much alike. I am sure he catches fish the same way I do—when he is hungry.

With a hook and line, as you do?

Oh, no ; with my bill, which is long, you observe, and made for that very purpose. You should just see me catch a fish ! Down I fly to a stump near the brook, or to a limb of a tree which overhangs the water, and there I sit as quiet as a mouse for quite a while.

Everything being so quiet, a fine speckled trout, or a school of troutlets, play near the surface. Now is my chance ! Down I swoop, and up I come with a fish crosswise in my bill.

Back I go to my perch, toss the minnow into the air, and as it falls catch it head first and swallow it whole. I tell you this because you ought to know why I am called *Kingfisher*.

Do we swallow bones and all?

Yes, but we afterwards eject the bones, when we are resting or roosting in our holes in the banks of the stream. That must be the reason people who write about us say we build our nests of fish bones.

Sing?

Oh, no, we are not singing birds ; but sometimes, when flying swiftly through the air, we give a harsh cry that nobody but a bird understands.

Your friend,
THE ENGLISH KINGFISHER.

THE VERMILION FLY-CATCHER.

THICKETS along water courses are favorite resorts of this beautiful Fly-catcher, which may be seen only on the southern border of the United States, south through Mexico to Guatemala, where it is a common species. Mr. W. E. D. Scott notes it as a common species about Riverside, Tucson, and Florence, Arizona. Its habits are quite similar to those of other Fly-catchers, though it has not been so carefully observed as its many cousins in other parts of the country. During the nesting season, the male frequently utters a twittering song while poised in the air, in the manner of the Sparrow Hawk, and during the song it snaps its bill as if catching insects.

The Vermilion's nest is usually placed in horizontal forks of ratana trees, and often in mesquites, not more than six feet from the ground; they are composed of small twigs and soft materials felted together, with the rims covered with lichens, and the shallow cavity lined with a few horse or cow hairs. Dr. Merrill states that they bear considerable resemblance to nests of the Wood Pewee in appearance and the manner in which they are saddled to the limb. Nests have been found, however, which lacked the exterior coating of lichens.

Three eggs are laid of a rich creamy-white with a ring of large brown and lilac blotches at the larger end.

A WINTER NEST.

Pallid, wan-faced clouds
Press close to the frozen pines,
And follow the jagged lines
Of fence, that the sleet enshrouds.

Sharp in the face of the sky,
Gaunt, thin-ribbed leaves are blown;
They rise with a shuddering moan,
Then sink in the snow and die.

At the edge of the wood a vine
Still clings to the sleeping beech,
While its stiffened tendrils reach
A nest, and around it twine.

A little gray nest all alone,
With its feathery lining of snow,
Where bleak winds, piping low,
Croon a sweet minor tone.

—NORA A. PIPER.



From col. George F. Breninger.

VERMILION FLYCATCHER.
 $\frac{3}{4}$ Life-size.

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BIRD MISCELLANY.

Red and yellow, green and brown,
Leaves are whirling, rustling down ;
Acorn babes in their cradles lie,
Through the bare trees the brown birds fly ;
The Robin chirps as he flutters past—
November days have come at last.
—CLARA LOUISE STRONG.

“I have watched birds at their singing under many and widely differing circumstances, and I am sure that they express joyous anticipation, present content, and pleasant recollection, each as the mood moves, and with equal ease.”

—M. THOMPSON.

“The act of singing is evidently a pleasurable one ; and it probably serves as an outlet for superabundant nervous energy and excitement, just as dancing, singing, and field sports do with us.”

—A. R. WALLACE.

“The bird upon the tree utters the meaning of the wind—a voice of the grass and wild flower, words of the green leaf; they speak through that slender tone. Sweetness of dew and rifts of sunshine, the dark hawthorn touched with breadths of open bud, the odor of the air, the color of the daffodil—all that is delicious and beloved of spring-time are expressed in his song.”

—RICHARD JEFFERIES.

THE LAZULI BUNTING.

The joy is great of him who strays
In shady woods on summer days.

—MAURICE THOMPSON.

IN Colorado and Arizona the Lazuli Painted Finch, as it is called, is common, while in California it is very abundant, being, in fact, generally distributed throughout the west, and along the Pacific Coast it is found as far north as Puget Sound, during the summer. Davie says it replaces the Indigo Bunting, (See BIRDS, Vol. I, page 173,) from the Plains to the Pacific, being found in all suitable localities. The nest is usually built in a bush or in the lower limbs of trees, a few feet from the ground. Fine strips of bark, small twigs, grasses, and hair are used in preparing it for the four tiny, light bluish-green eggs, which readily fade when exposed to light. The eggs so closely resemble those of the Bluebird as not to be distinguishable with certainty. The nest is an inartistic one for a bird of gay plumage.

From Florence A. Merriam's charming book, "A-Birding on a Bronco," we select a description of the pretty manners of this attractive bird. She says:

"While waiting for the Woodpeckers, one day, I saw a small brownish bird flying busily back and forth to some green weeds. She was joined by her mate, a handsome blue Lazuli Bunting, even more beautiful than our lovely Indigo, and he flew beside her full of life and joy. He lit on the side of a cockle stem, and on the instant caught sight of me. Alas! he seemed suddenly turned to stone. He held onto that stalk as if his little legs had been bars of iron and I a devouring monster. When he had collected his wits enough to fly off, instead of the careless gay flight with

which he had come out through the open air, he timidly kept low within the cockle field, making a circuitous way through the high stalks. He could be afraid of me if he liked, I thought, for after a certain amount of suspicion, an innocent person gets resentful; at any rate I was going to see that nest. Creeping up cautiously when the mother bird was away, so as not to scare her, and carefully parting the mallows, I looked in. Yes, there it was, a beautiful little sage-queen nest of old grass laid in a coil. I felt as pleased as if having a right to share the family happiness. After that I watched the small worker gather material with new interest, knowing where she was going to put it. She worked fast, but did not take the first thing she found, by any means. With a flit of the wing she went in nervous haste from cockle to cockle, looking eagerly about her. Jumping down to the ground, she picked up a bit of grass, threw it down dissatisfied, and turned away like a person looking for something. At last she lit on the side of a thistle, and tweaking out a fibre, flew with it to the nest.

"A month after the first encounter with the father Lazuli, I found him looking at me around the corner of a cockle stalk, and in passing back again, caught him singing full tilt, though his bill was full of insects! After we had turned our backs I looked over my shoulder and had the satisfaction of seeing him take his beakful to the nest. You couldn't help admiring him, for though not a warrior who would snap his bill over the head of an enemy of his home, he had a gallant holiday air with his blue coat and merry song, and you felt sure his little brown mate would get cheer and courage enough from his presence to make family dangers appear less frightful."





From col. John F. Ferry.

CHICAGO COLORTYPE CO

LAZULI BUNTING.
 $\frac{7}{8}$ Life-size.

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THE LAZULI BUNTING.

You think you have seen me before? Well, I must admit my relative, the Indigo Bunting, and I *do* look alike. They say though, I am the prettier bird of the two. Turn to your March number, page 173, and decide for yourselves.

I live farther west than he does. You find him in the eastern and middle states. Then he disappears and I take his place, all the way from the Great Plains to the Pacific Ocean.

Some people call me the Lazuli Painted Finch. That's funny, for I never painted anything in my life—not even my cheeks. Would you like to know how my mate and I go to house-keeping? A lady who visits California, where I live, will tell you all about it. She rides a horse called Mountain Billy. He will stand still under a tree so that she can peep into nests and count the eggs, when the mother bird is away.

She can travel a good many miles in that way, and meet lots of birds. She says in her book, that she has got acquainted with seventy-five families, without robbing one nest, or doing the little creatures any harm.

Well, one day this lady saw a brownish bird flying busily back

and forth to some tall green weeds. After a while a handsome blue Bunting flew along side of her, full of life and joy.

That was my mate and I. How frightened I was! for our nest was in those green weeds and not very far from the ground. I flew away as soon as I could pluck up courage, but not far, so that I could watch the lady and the nest. How my heart jumped when I saw her creep up, part the weeds and look in. All she saw was a few twigs and a sage-green nest of old grass laid in a coil. My mate hadn't put in the lining yet; you see it takes her quite a while to get the thistle down and the hair and strips of bark for the inside. The next time the lady passed, the house was done and my mate was sitting on the nest. She just looked down at us from the back of Mountain Billy and passed on.

Four weeks after, she came again, and there I was, flying about and singing "like a bird," my mouth full of insects, too. I waited 'till she had turned away before I flew to the nest to feed our little ones. I didn't know, you see, that she was such a good friend of ours, or I wouldn't have been so afraid.

SUMMARY

Page 163.

SUMMER TANAGER.—*Piranga rubra*. Other names: "Summer Red-bird," "Rose Tanager."

RANGE—Eastern United States west to the edge of the Plains; north regularly to about 40°—New Jersey, central Ohio, Illinois, casually north to Connecticut and Ontario, accidentally to Nova Scotia, wintering in Cuba, Central America, and northern South America. (Davie.)

NEST—Of bark strips and leaves interwoven with various vegetable substances, on drooping branch of tree.

EGGS—Three or four, bluish white or greenish blue, with cinnamon or olive-brown markings.

Page 168.

AMERICAN WHITE-FRONTED GOOSE.—*Anser albifrons gambeli*. Other names: "Laughing Goose," "Speckle Belly."

RANGE—North America, breeding far northward; in winter south to Mexico and Cuba, rare on the Atlantic coast.

NEST—On the ground, of grasses lined with down.

EGGS—Six or seven, dull greenish yellow with obscure darker tints.

Page 171.

TURNSTONE.—*Arenaria interpres*. Other names: "Brant Bird," "Calico-back," "Bead-bird," "Sand-runner," "Chickling," "Horse-foot Snipe"

RANGE—Nearly cosmopolitan; nests in the Arctic regions, and in America migrates southward to Patagonia. (Chapman.)

NEST—A slight depression on the ground.

EGGS—Two or four, greenish drab, spotted all over with brown.

Page 175.

THE BELTED PIPING PLOVER.—*Aegialitis meloda circumcincta*.

RANGE—Missouri river region; occasionally eastward to the Atlantic coast.

NEST—Depression in the sand without lining.

EGGS—Four, light gray to creamy buff, finely speckled with blackish brown and purplish gray.

Page 180.

WILD TURKEY.—*Meleagris gallopavo*.

RANGE—Eastern United States from Pennsylvania southward to Florida, west to Wisconsin, the Indian Territory and Texas.

NEST—On the ground, at the base of a bush or tree.

EGGS—Ten to fourteen, pale cream buff, finely and evenly speckled with grayish brown.

Page 181.

CERULEAN WARBLER.—*Dendroica caerulesca*. Other names: "Azure Warbler;" "White-throated Blue Warbler."

RANGE—Mississippi valley as far north as Minnesota, and eastward as far as Lockport, N. Y. (Davison.) Winters in the tropics.

NEST—Of fine grasses bound with spider's silk, lined with strips of bark and with a few lichens attached to its upper surface, in a tree, twenty-five to fifty feet from the ground. (Chapman.)

EGGS—Four, creamy white, thickly covered with rather heavy blotches of reddish brown.

Page 186.

YELLOW-BILLED TROPIC BIRD.—*Phaethon flavirostris*. Other names: "Phaeton."

RANGE—Tropical coasts; Atlantic coasts of tropical America, West Indies, Bahamas, Bermudas; casual in Florida and accidental in Western New York and Nova Scotia. (Chapman.)

NEST—In holes in the perpendicular faces of cliffs, also on the flat surfaces of rocks.

EGGS—One, ground color of purplish brownish white, covered with fine reddish chocolate-colored spots. (Davie.)

Page 190.

EUROPEAN KINGFISHER.—*Alcedo ispida*.

RANGE—England and portions of Europe.

NEST—In holes of the banks of streams.

EGGS—Usually six, of a deep pinkish hue.

Page 193.

VERMILION FLYCATCHER.—*Pyrocephalus rubineus mexicanus*.

RANGE—Southern Border of the United States south through Mexico and Guatemala.

NEST—In forks of ratana trees, not more than six feet up, of small twigs and soft materials felted together, the rims covered with lichens; the cavity is shallow.

EGGS—Usually three, the ground color a rich creamy white, with a ring of large brown and lilac blotches at the larger end.

Page 198.

LAZULI BUNTING.—*Passerina amoena*. Other name: "Lazuli Painted Finch."

RANGE—Western United States from the Great Plains to the Pacific; south in winter to Western Mexico.

NEST—In a bush or the lower limbs of trees, a few feet from the ground, of fine strips of bark, small twigs, grasses, and is lined with hair.

EGGS—Usually four, light bluish green.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

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DECEMBER, 1897.

No. 6.

THE ORNITHOLOGICAL CONGRESS.

WE had the pleasure of attending the Fifteenth Congress of the American Ornithologists' Union, which met and held its three days annual session in the American Museum of Natural History, New York City, November 9-11, 1897. Dr. C. Hart Merriam, of the Department of Agriculture, Washington, D. C., presided, and there were present about one hundred and fifty of the members, resident in nearly all the states of the Union.

The first paper read was one prepared by J. C. Merrill, entitled "In Memoriam: Charles Emil Bendire." The character, accomplishments, and achievements of the deceased, whose valuable work in biographizing American birds is so well known to those interested in ornithology, were referred to in so appropriate a manner that the paper, though not elaborate as it is to be hoped it may ultimately be made, will no doubt be published for general circulation. Major Bendire's services to American ornithology are of indisputable value, and his untimely death eclipsed to some extent, possibly wholly, the conclusion of a series of bird biographies which, so far as they had appeared, were deemed to be adequate, if not perfect.

Mr. Frank M. Chapman, the well known authority on birds, and whose recent books are valuable additions to our literature, had, it may be presumed, a paper to read on the "Experiences of an Ornithologist in Mexico," though

he did not read it. He made, on the contrary, what seemed to be an extemporaneous talk, exceedingly entertaining and sufficiently instructive to warrant a permanent place for it in the *Auk*, of which he is associate editor. We had the pleasure of examining the advance sheets of a new book from his pen, elaborately illustrated in color, and shortly to be published. Mr. Chapman is a comparatively young man, an enthusiastic student and observer, and destined to be recognized as one of our most scientific thinkers, as many of his published pamphlets already indicate. Our limited space precludes even a reference to them now. His remarks were made the more attractive by the beautiful stuffed specimens with which he illustrated them.

Prof. Elliott Coues, in an address, "Auduboniana, and Other Matters of Present Interest," engaged the delighted attention of the Congress on the morning of the second day's session. His audience was large. In a biographical sketch of Audubon the Man, interspersed with anecdote, he said so many interesting things that we regret we omitted to make any notes that would enable us to indicate at least something of his characterization. No doubt just what he said will appear in an appropriate place. Audubon's portfolio, in which his precious manuscripts and drawings were so long religiously kept, which he had carried with him to London to exhibit to possible publishers, a book so large that two men were required to carry it,

though the great naturalist had used it as an indispensable and convenient companion for so many years, was slowly and we thought reverently divested by Dr. Coues of its wrappings and held up to the surprised and grateful gaze of the spectators. It was dramatic. Dr. Coues is an actor. And then came the comedy. He could not resist the inclination to talk a little—not disparagingly, but truthfully, reading a letter never before published, of Swainson to Audubon declining to associate his name with that of Audubon “under the circumstances.” All of which, we apprehend, will duly find a place on the shelves of public libraries.

We would ourself like to say something of Audubon as a man. To us his life and character have a special charm. His was a beautiful youth, like that of Goethe. His love of nature, for which he was willing to make, and did make, sacrifices, will always be inspiring to the youth of noble and gentle proclivities; his personal beauty, his humanity, his love-life, his domestic virtues, enthrall the ingenuous mind; and his appreciation—shown in his beautiful compositions—of the valleys of the great river, *La Belle Riviere*, through which its waters, shadowed by the magnificent forests of Ohio and Kentucky, wandered—all of these things have from youth up shed a sweet fragrance over his memory and added greatly to our admiration of and appreciation for the man.

So many subjects came before the Congress that we cannot hope to do more than mention the titles of a few of them. Mr. Sylvester D. Judd discussed the question of “Protective Adaptations of insects from an Ornithological Point of View;” Mr. William C. Rives talked of “Summer Birds of the West Virginia Spruce Belt;” Mr. John N. Clark read a paper entitled “Ten Days among the Birds of North-

ern New Hampshire;” Harry C. Oberholser talked extemporaneously of “Liberian Birds,” and in a most entertaining and instructive manner, every word he said being worthy of large print and liberal embellishment; Mr. J. A. Allen, editor of *The Auk*, said a great deal that was new and instructive about the “Origin of Bird Migration;” Mr. O. Widmann read an interesting paper on “The Great Roosts on Gabberet Island, opposite North St. Louis;” J. Harris Reed presented a paper on “The Terns of Gull Island, New York;” A. W. Anthony read of “The Petrels of Southern California,” and Mr. George H. Mackay talked interestingly of “The Terns of Penikese Island, Mass.”

There were other papers of interest and value. “A Naturalist’s Expedition to East Africa,” by D. G. Elliot, was, however, the *piece de resistance* of the Congress. The lecture was delivered in the lecture hall of the Museum, on Wednesday at 8 p. m. It was illustrated by stereopticon views, and in the most remarkable manner. The pictures were thrown upon an immense canvas, were marvellously realistic, and were so much admired by the great audience, which overflowed the large lecture hall, that the word demonstrative does not describe their enthusiasm. But the lecture! Description, experience, suffering, adventure, courage, torrid heat, wild beasts, poisonous insects, venomous serpents, half-civilized peoples, thirst,—almost enough of torture to justify the use of Coleridge’s Ancient Mariner in illustration,—and yet a perpetual, quiet, rollicking, jubilant humor, all-pervading, and, at the close, on the lecturer’s return once more to the beginning of civilization, the eloquent picture of the Cross, “full high advanced,” all combined, made this lecture, to us, one of the very few platform addresses entirely worthy of the significance of unfading portraiture.

—C. C. MARBLE.



From col. Chi. Acad. Sciences.

MOUNTAIN BLUE BIRD.
3/4 Life-size.

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THE MOUNTAIN BLUEBIRD.

IN an early number of BIRDS we presented a picture of the common Bluebird, which has been much admired. The mountain Bluebird, whose beauty is thought to excel that of his cousin, is probably known to few of our readers who live east of the Rocky Mountain region, though he is a common winter sojourner in the western part of Kansas, beginning to arrive there the last of September, and leaving in March and April. The habits of these birds of the central regions are very similar to those of the eastern, but more wary and silent. Even their love song is said to be less loud and musical. It is a rather feeble, plaintive, monotonous warble, and their chirp and twittering notes are weak. They subsist upon the cedar berries, seeds of plants, grasshoppers, beetles, and the like, which they pick up largely upon the ground, and occasionally scratch for among the leaves. During the fall and winter they visit the plains and valleys, and are usually met with in small flocks, until the mating season.

Nests of the Mountain Bluebird have been found in New Mexico and Colorado, from the foothills to near timber line, usually in deserted Woodpecker holes, natural cavities in trees, fissures in the sides of steep rocky cliffs, and, in the settlements, in suitable locations about and in the adobe buildings. In settled portions of the west it nests in the cornice of buildings, under the eaves of porches, in the nooks and corners of barns and out-houses, and in boxes provided for its occupation. Prof. Ridgway found the Rocky Mountain Bluebird nesting in Virginia City, Nevada, in June. The nests were composed almost entirely of dry grass. In some sections, however, the inner bark of the cedar enters largely into their composition. The eggs are usually five, of a pale greenish-blue.

The females of this species are distinguished by a greener blue color and longer wings, and this bird is often called the Arctic Bluebird. It is emphatically a bird of the mountains, its visits to the lower portions of the country being mainly during winter.

Heaped in the hollows of the grove, the autumn leaves lie dead;
They rustle to the eddying gust, and to the rabbits' tread.
The Robin and the Wren are flown, and from the shrubs the Jay,
And from the wood-top calls the Crow all through the gloomy day.

—BRYANT.

THE ENGLISH SPARROW.

"Oh, it's just a common Sparrow," I hear Bobbie say to his mamma, "why, I see lots of them on the street every day."

Of course you do, but for all that you know very little about me I guess. Some people call me "Hoodlum," and "Pest," and even "Rat of the Air." I hope you don't. It is only the folks who don't like me that call me ugly names.

Why don't they like me?

Well, in the first place the city people, who like fine feathers, you know, say I am not pretty; then the farmers, who are not grateful for the insects I eat, say I devour the young buds and vines as well as the ripened grain. Then the folks who like birds with fine feathers, and that can sing like angels, such as the Martin and the Bluebird and a host of others, say I drive them away, back to the forests where they came from.

Do I do all these things?

I'm afraid I do. I like to have my own way. Maybe you know something about that yourself, Bobbie. When I choose a particular tree or place for myself and family to live in, I am going to have it if I have to fight for it. I do chase the other birds away then, to be sure.

Oh, no, I don't always succeed. Once I remember a Robin got the better of me, so did a Catbird, and another time a Baltimore Oriole. When I can't whip a bird myself I generally give a call and a whole troop of Sparrows will come to my aid. My, how we do enjoy a fuss like that!

A bully? Well, yes, if by that you mean I rule around my own house, then I *am* a bully. My mate has to do just as I say, and the little Sparrows have to mind their papa, too.

"Don't hurt the little darlings, papa," says their mother, when it comes time for them to fly, and I hop about the nest, scolding them at the top of my voice. Then I scold her for daring to talk to me, and sometimes make her fly away while I teach the young ones a thing or two. Once in a while a little fellow among them will "talk back." I don't mind that though, if he is a Cock Sparrow and looks like his papa.

No, we do not sing. We leave that for the Song Sparrows. We talk a great deal, though. In the morning when we get up, and at night when we go to bed we chatter a great deal. Indeed there are people shabby enough to say that we are great nuisances about that time.



From col. Chl. Acad. Sciences.

ENGLISH SPARROW.
Life-size.

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THE ENGLISH SPARROW.

THE English Sparrow was first introduced into the United States at Brooklyn, New York, in the years 1851 and '52.

The trees in our parks were at that time infested with a canker-worm, which wrought them great injury, and to rid the trees of these worms was the mission of the English Sparrow.

In his native country this bird, though of a seed-eating family (Finch), was a great insect eater. The few which were brought over performed, at first, the duty required of them; they devoured the worms and stayed near the cities. With the change of climate, however, came a change in their taste for insects. They made their home in the country as well as the cities, and became seed and vegetable eaters, devouring the young buds on vines and trees, grass-seed, oats, rye, and other grains.

Their services in insect-killing are still not to be despised. A single pair of these Sparrows, under observation an entire day, were seen to convey to their young no less than forty grubs an hour, an average exceeding three thousand in the course of a week. Moreover, even in the autumn he does not confine himself to grain, but feeds on various seeds, such as the dandelion, the sow-thistle, and the groundsel; all of which plants are classed as weeds. It has been known, also, to chase and devour the common white butterfly, whose caterpillars make havoc among the garden plants.

The good he may accomplish in this direction, however, is nullified to the lovers of the beautiful, by the war he constantly wages upon our song birds, destroying their young, and substituting his unattractive looks and inharmonious chirps for their beautiful plumage and soul-inspiring songs.

Mrs. Olive Thorne Miller in "Bird Ways" gives a fascinating picture of

the wooing of a pair of Sparrows in a maple tree, within sight of her city window, their setting up house-keeping, domestic quarrel, separation, and the bringing home, immediately after, of a new bride by the Cock Sparrow.

She knows him to be a domestic tryant, a bully in fact, self-willed and violent, holding out, whatever the cause of disagreement, till he gets his own will; that the voices of the females are less harsh than the males', the chatter among themselves being quite soft, as is their "baby-talk" to the young brood.

That they delight in a mob we all know; whether a domestic skirmish or danger to a nest, how they will all congregate, chirping, pecking, scolding, and often fighting in a fierce yet amusing way! One cannot read these chapters of Mrs. Miller's without agreeing with Whittier:

"Then, smiling to myself, I said,—
How like are men and birds!"

Although a hardy bird, braving the snow and frost of winter, it likes a warm bed, to which it may retire after the toils of the day. To this end its resting place, as well as its nest, is always stuffed with downy feathers. Tramp, Hoodlum, Gamin, Rat of the Air! Notwithstanding these more or less deserved names, however, one cannot view a number of homeless Sparrows, presumably the last brood, seeking shelter in any corner or crevice from a winter's storm, without a feeling of deep compassion. The supports of a porch last winter made but a cold roosting place for three such wanderers within sight of our study window, and never did we behold them, 'mid a storm of sleet and rain, huddle down in their cold, ill-protected beds, without resolving another winter should see a home prepared for them.

ALLEN'S HUMMING BIRD.

THE Humming birds, with their varied beauties, constitute the most remarkable feature of the bird-life of America. They have absolutely no representatives in any other part of the world, the Swifts being the nearest relatives they have in other countries. Mr. Forbes says that they abound most in mountainous countries, where the surface and productions of the soil are most diversified within small areas. They frequent both open and rare and inaccessible places, and are often found on the snowy peaks of Chimborazo as high as 16,000 feet, and in the very lowest valleys in the primeval forests of Brazil, the vast palm-covered districts of the deltas of the Amazon and Orinoco, the fertile flats and savannahs of Demarara, the luxurious and beautiful region of Xalapa, (the realm of perpetual sunshine), and other parts of Mexico. Many of the highest cones of extinct and existing volcanoes have also furnished great numbers of rare species.

These birds are found as small as a bumble bee and as large as a Sparrow. The smallest is from Jamaica, the largest from Patagonia.

Allen's Hummer is found on the Pacific coast, north to British Columbia, east to southern Arizona.

Mr. Langille, in "Our Birds in their Haunts," beautifully describes their flights and manner of feeding. He says "There are many birds the flight of which is so rapid that the strokes of their wings cannot be counted, but here is a species with such nerve of wing

that its wing strokes cannot be seen. 'A hazy semi-circle of indistinctness on each side of the bird is all that is perceptible.' Poised in the air, his body nearly perpendicular, he seems to hang in front of the flowers which he probes so hurriedly, one after the other, with his long, slender bill. That long, tubular, fork-shaped tongue may be sucking up the nectar from those rather small cylindrical blossoms, or it may be capturing tiny insects housed away there. Much more like a large sphynx moth hovering and humming over the flowers in the dusky twilight, than like a bird, appears this delicate, fairy-like beauty. How the bright green of the body gleams and glistens in the sunlight. Each imperceptible stroke of those tiny wings conforms to the mechanical laws of flight in all their subtle complications with an ease and gracefulness that seems spiritual. Who can fail to note that fine adjustment of the organs of flight to aerial elasticity and gravitation, by which that astonishing bit of nervous energy can rise and fall almost on the perpendicular, dart from side to side, as if by magic, or, assuming the horizontal position, pass out of sight like a shooting star? Is it not impossible to conceive of all this being done by that rational calculation which enables the rower to row, or the sailor to sail his boat?"

"What heavenly tints in mingling radiance
fly,
Each rapid movement gives a different dye ;
Like scales of burnished gold they dazzling
show,
Now sink to shade, now like a furnace glow."



From col. F. M. Woodruff.

ALLENS HUMMING BIRD.
Life-size.

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THE GREEN-WINGED TEAL.

Just a common Duck ?

No, I'm not. There is only one other Duck handsomer than I am, and he is called the Wood Duck. You have heard something about him before. I am a much smaller Duck, but size doesn't count much, I find when it comes to getting on in the world—in *our* world, that is. I have seen a Sparrow worry a bird four times its size, and I expect you have seen a little boy do the same with a big boy many a time.

What is the reason I'm not a common Duck ?

Well, in the first place, I don't waddle. I can walk just as gracefully as I can swim. Your barn-yard Duck can't do that. I can run, too, without getting all tangled up in the grass, and he can't do that, either. But sometimes I don't mind associating with the common Duck. If he lives in a nice big barn-yard, that has a good pond, and is fed with plenty of grain, I visit him quite often.

Where do I generally live ?

Well, along the edges of shallow, grassy waters, where I feed upon grass, seeds, acorns, grapes, berries, as well as insects, worms, and small snails. I walk quite a distance from the water to get these things, too.

Can I fly ?

Indeed I can, and very swiftly. You can see I am no common Duck when

I can swim, and walk, and fly. *You* can't do the last, though you can the first two.

Good to eat ?

Well, yes, they say when I feed on rice and wild oats I am perfectly delicious. Some birds were, you see, born to sing, and flit about in the trees, and look beautiful, while some were born to have their feathers taken off, and be roasted, and to look fine in a big dish on the table. The Teal Duck is one of those birds. You see we are useful as well as pretty. We don't mind it much if you eat us and say, "what a fine bird!" but when you call us "tough," that hurts our feelings.

Good for Christmas ?

Oh, yes, or any other time—when you can catch us! We fly so fast that that it is not easy to do; and can dive under the water, too, when wounded.

Something about our nests ?

Oh, they are built upon the ground, in a dry tuft of grass and weeds and lined with feathers. My mate often plucks the feathers from her own breast to line it. Sometimes she lays ten eggs, indeed once she laid sixteen.

Such a family of Ducklings as we had that year! You should have seen them swimming after their mother, and all crying, *Quack, quack, quack!* like babies as they were.

THE GREEN-WINGED TEAL.

A HANDSOME little Duck indeed is this, well known to sportsmen, and very abundant throughout North America. It is migratory in its habits, and nests from Minnesota and New Brunswick northward, returning southward in winter to Central America and Cuba.

The green wing is commonly found in small flocks along the edges of shallow, grassy waters, feeding largely upon seeds of grasses, small acorns, fallen grapes or berries, as well as aquatic insects, worms, and small snails. In their search for acorns these ducks are often found quite a distance from the water, in exposed situations feeding largely in the night, resting during the day upon bogs or small bare spots, closely surrounded and hidden by reeds and grasses.

On land this Duck moves with more ease and grace than any other of its species except the Wood Duck, and it can run with considerable speed. In the water also it moves with great ease and rapidity, and on the wing it is one of the swiftest of its tribe. From the water it rises with a single spring and so swiftly that it can be struck only by a very expert marksman; when wounded it dives readily.

As the Teal is more particular in the selection of its food than are most Ducks, its flesh, in consequence, is very delicious. Audubon says that when this bird has fed on wild oats at Green Bay, or soaked rice in the fields of Georgia or Carolina, it is much superior to the Canvas back in tenderness, juiciness, and flavor.

G. Arnold, in the *Nidologist*, says while traveling through the northwest he was surprised to see the number of Ducks and other wild fowl in close proximity to the railway tracks. He found a number of Teal nests with-

in four feet of the rails of the Canadian Pacific in Manitoba. The warm, sun-exposed banks along the railway tracks, shrouded and covered with thick grass, afford a very fair protection for the nests and eggs from water and marauders of every kind. As the section men seldom disturbed them—not being collectors—the birds soon learned to trust them and would sit on their nests by the hour while the men worked within a few feet of them.

The green-winged Teal is essentially a fresh-water bird, rarely being met with near the sea. Its migrations are over the land and not along the sea shore. It has been seen to associate with the Ducks in a farmer's yard or pond and to come into the barnyard with tame fowls and share the corn thrown out for food.

The nests of the Teal are built upon the ground, generally in dry tufts of grass and often quite a distance from the water. They are made of grass, and weeds, etc., and lined with down. In Colorado under a sage brush, a nest was found which had been scooped in the sand and lined warmly with down evidently taken from the bird's own breast, which was plucked nearly bare. This nest contained ten eggs.

The number of eggs, of a pale buff color, is usually from eight to twelve, though frequently sixteen or eighteen have been found. It is far more prolific than any of the Ducks resorting to Hudson's Bay, and Mr. Hearn says he has seen the old ones swimming at the head of seventeen young when the latter were not much larger than walnuts.

In autumn the males usually keep in separate flocks from the females and young. Their notes are faint and piping and their wings make a loud whistling during flight.



From col. Ch. Acad. Sciences.

GREEN-WINGED TEAL.
 $\frac{1}{8}$ Life-size.

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THE BLACK GROUSE.

Alone on English moor's I've seen the Black Cock stray,
Sounding his earnest love-note on the air.

—ANON.

WELL known as the Black Cock is supposed to be, we fancy few of our readers have ever seen a specimen. It is a native of the more southern countries of Europe, and still survives in many portions of the British Islands, especially those localities where the pine woods and heaths afford it shelter, and it is not driven away by the presence of human habitation.

The male bird is known to resort at the beginning of the nesting season to some open spot, where he utters his love calls, and displays his new dress to the greatest advantage, for the purpose of attracting as many females as may be willing to consort with him. His note when thus engaged is loud and resonant, and can be heard at a considerable distance. This crowing sound is accompanied by a harsh, grating, stridulous kind of cry which has been compared to the noise produced by whetting a scythe. The Black Cock does not pair, but leaves his numerous mates to the duties of maternity and follows his own desires while they prepare their nests, lay their eggs, hatch them, and bring up the young. The mother bird, however, is a fond, watchful parent, and when she has been alarmed by man or a prowling beast, has been known to remove her eggs to some other locality, where she thinks they will not be discovered.

The nest is carelessly made of grasses and stout herbage, on the ground, under the shelter of grass and bushes.

There are from six to ten eggs of yellowish gray, with spots of light brown. The young are fed first upon insects, and afterwards on berries, grain, and the buds and shoots of trees.

The Black Grouse is a wild and wary creature. The old male which has survived a season or two is particularly shy and crafty, distrusting both man and dog, and running away as soon as he is made aware of approaching danger.

In the autumn the young males separate themselves from the other sex and form a number of little bachelor establishments of their own, living together in harmony until the next nesting season, when they all begin to fall in love; "the apple of discord" is thrown among them by the charms of the hitherto repudiated sex, and their rivalries lead them into determined and continual battles, which do not cease until the end of the season restores them to peace and sobriety."

The coloring of the female is quite different from that of the male Grouse. Her general color is brown, with a tinge of orange, barred with black and speckled with the same hue, the spots and bars being larger on the breast, back, and wings, and the feathers on the breast more or less edged with white. The total length of the adult male is about twenty-two inches, and that of the female from seventeen to eighteen inches. She also weighs nearly one-third less than her mate, and is popularly termed the Heath Hen.

THE AMERICAN FLAMINGO.

IN this interesting family of birds are included seven species, distributed throughout the tropics. Five species are American, of which one reaches our southern border in Florida. Chapman says that they are gregarious at all seasons, are rarely found far from the seacoasts, and their favorite resorts are shallow bays or vast mud flats which are flooded at high water. In feeding the bill is pressed downward into the mud, its peculiar shape making the point turn upward. The ridges along its sides serve as strainers through which are forced the sand and mud taken in with the food.

The Flamingo is resident in the United States only in the vicinity of Cape Sable, Florida, where flocks of sometimes a thousand of these rosy vermillion creatures are seen. A wonderful sight indeed. Mr. D. P. Ingraham spent more or less of his time for four seasons in the West Indies among them. He states that the birds inhabit the shallow lagoons and bays having soft clayey bottoms. On the border of these the nest is made by working the clay up into a mound which, in the first season is perhaps not more than a foot high and about eight inches in diameter at the top and fifteen inches

at the base. If the birds are unmolested they will return to the same nesting place from year to year, each season augmenting the nest by the addition of mud at the top, leaving a slight depression for the eggs. He speaks of visiting the nesting grounds where the birds had nested the previous year and their mound-like nests were still standing. The birds nest in June. The number of eggs is usually two, sometimes only one and rarely three. When three are found in a nest it is generally believed that the third has been laid by another female.

The stature of this remarkable bird is nearly five feet, and it weighs in the flesh six or eight pounds. On the nest the birds sit with their long legs doubled under them. The old story of the Flamingo bestriding its nest in an ungainly attitude while sitting is an absurd fiction.

The eggs are elongate-ovate in shape, with a thick shell, roughened with a white flakey substance, but bluish when this is scraped off. It requires thirty-two days for the eggs to hatch.

The very fine specimen we present in BIRDS represents the Flamingo feeding, the upper surface of the unique bill, which is abruptly bent in the middle, facing the ground.



From col. C. E. Petford.

BLACK GROUSE.
 $\frac{1}{2}$ Life-size.

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From col. Chi. Acad. Sciences.

FLAMINGO.
 $\frac{1}{2}$ Life-size.

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THE BIRDS OF BETHLEHEM.

I.

I heard the bells of Bethlehem ring—
Their voice was sweeter than the priests';
I heard the birds of Bethlehem sing
Unbidden in the churchly feasts.

II.

They clung and swung on the swinging chain
High in the dim and incensed air:
The priest, with repetitions vain,
Chanted a never ending prayer.

III.

So bell and bird and priest I heard,
But voice of bird was most to me—
It had no ritual, no word,
And yet it sounded true and free.

IV.

I thought child Jesus, were he there,
Would like the singing birds the best,
And clutch his little hands in air
And smile upon his mother's breast.

R. W. GILDER, in *The Century*.

THE BIRD'S STORY.

"I once lived in a little house,
And lived there very well ;
I thought the world was small and round,
And made of pale blue shell.

I lived next in a little nest,
Nor needed any other ;
I thought the world was made of straw,
And brooded by my mother.

One day I fluttered from the nest
To see what I could find.
I said : 'The world is made of leaves,
I have been very blind.'

At length I flew beyond the tree,
Quite fit for grown-up labors ;
I don't know how the world is made,
And neither do my neighbors."



From col. F. M. Woodruff.

VERDIN.
 $\frac{1}{2}$ Life-size.

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THE VERDIN.

A DAINTY little creature indeed is the Yellow-headed Bush Tit, or Verdin, being smaller than the largest North American Humming Bird, which inhabits southern Arizona and southward. It is a common bird in suitable localities throughout the arid regions of Northern Mexico, the southern portions of Texas, Arizona, New Mexico, and in Lower California. In spite of its diminutive size it builds a remarkable structure for a nest—large and bulky, and a marvel of bird architecture. Davie says it is comparatively easy to find, being built near the ends of the branches of some low, thorny tree or shrub, and in the numerous varieties

of cacti and thorny bushes which grow in the regions of its home.

The nest is globular, flask-shaped or retort shape in form, the outside being one mass of thorny twigs and stems interwoven, while the middle is composed of flower-stems and the lining is of feathers. The entrance is a small circular opening. Mr. Atwater says that the birds occupy the nests during the winter months. They are generally found nesting in the high, dry parts of the country, away from tall timber, where the thorns are the thickest. From three to six eggs are laid, of a bluish or greenish-white or pale blue, speckled, chiefly round the larger end, with reddish brown.

“The woods were made for the hunters of dreams,
The brooks for the fishers of song.
To the hunters who hunt for the gunless game
The woods and the streams belong.
There are thoughts that moan from the soul of the pine,
And thoughts in the flower-bell curled,
And the thoughts that are blown from the scent of the fern
Are as new and as old as the world.”

THE BRONZED GRACKLE.

You can call me the Crow Blackbird, little folks, if you want to. People generally call me by that name.

I look something like the Crow in the March number of BIRDS, don't I? My dress is handsomer than his, though. Indeed I am said to be a splendid looking bird, my bronze coat showing very finely in the trees.

The Crow said *Caw, Caw, Caw!* to the little boys and girls. That was his way of talking. My voice is not so harsh as his. I have a note which some people think is quite sweet; then my throat gets rusty and I have some trouble in finishing my tune. I puff out my feathers, spread my wings and tail, then lifting myself on the perch force out the other notes of my song. Maybe you have seen a singer on the stage, instead of a perch, do the same thing. Had to get on his tip-toes to reach a high note, you know.

Like the Crow I visit the corn-fields, too. In the spring when the man with the plow turns over the rich earth, I follow after and pick up all the grubs and insects I can find. They would destroy the young corn if I didn't eat them. Then, when the corn grows up, I, my sisters, and my cousins, and my aunts drop down into the field in

great numbers. Such a picnic as we do have! The farmers don't seem to like it, but certainly they ought to pay us for our work in the spring, don't you think? Then I think worms as a steady diet are not good for anybody, not even a Crow, do you?

We like nuts, too, and little crayfish which we find on the edges of ponds. No little boy among you can beat us in going a-nutting.

We Grackles are a very sociable family, and like to visit about among our neighbors. Then we hold meetings and all of us try to talk at once. People say we are very noisy at such times, and complain a good deal. They ought to think of their own meetings. They do a great deal of talking at such times, too, and sometimes break up in a fight.

How do I know? Well, a little bird told me so.

Yes, we build our nest as other birds do; ours is not a dainty affair; any sort of trash mixed with mud will do for the outside. The inside we line with fine dry grass. My mate does most of the work, while I do the talking. That is to let the Robin and other birds know I am at home, and they better not come around.

Yours,
MR. BRONZED GRACKLE.





From col. Chl. Acad. Sciences.

BRONZED GRACKLE
2/3 Life-size.

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THE BRONZED GRACKLE.

First come the Blackbirds clatt'rin in tall trees,
And settlin' things in windy congresses,
Queer politicians though, for I'll be skinned
If all on 'em don't head against the wind.

—LOWELL.

BY the more familiar name of Crow Blackbird this fine but unpopular bird is known, unpopular among the farmers for his depredations in their cornfields, though the good he does in ridding the soil, even at the harvest season, of noxious insects and grubs should be set down to his credit.

The Bronzed Grackle or Western Crow Blackbird, is a common species everywhere in its range, from the Alleghanies and New England north to Hudson Bay, and west to the Rocky Mountains. It begins nesting in favorable seasons as early as the middle of March, and by the latter part of April many of the nests are finished. It nests anywhere in trees or bushes or boughs, or in hollow limbs or stumps at any height. A clump of evergreen trees in a lonely spot is a favorite site, in sycamore groves along streams, and in oak woodlands. It is by no means unusual to see in the same tree several nests, some saddled on horizontal branches, others built in large forks, and others again in holes, either natural or those made by the Flicker. A long list of nesting sites might be given, including Martin-houses, the sides of Fish Hawk's nests, and in church spires, where the Blackbirds' "clatterin'" is drowned by the tolling bell.

The nest is a coarse, bulky affair, composed of grasses, knotty roots mixed with mud, and lined with fine dry grass, horse hair, or sheep's wool. The eggs are light greenish or smoky blue, with irregular lines, dots and blotches distributed over the surface. The eggs average four to six, though nests have been found containing seven.

The Bronze Grackle is a bird of many accomplishments. He does not hop like the ordinary bird, but imitates the Crow in his stately walk, says one who has watched him with interest. He can pick beech nuts, catch cray fish without getting nipped, and fish for minnows alongside of any ten-year-old. While he is flying straight ahead you do not notice anything unusual, but as soon as he turns or wants to alight you see his tail change from the horizontal to the vertical—into a rudder. Hence he is called keel-tailed.

The Grackle is as omnivorous as the Crow or Blue Jay, without their sense of humor, and whenever opportunity offers will attack and eat smaller birds, especially the defenseless young. His own meet with the like fate, a fox squirrel having been seen to emerge from a hole in a large dead tree with a young Blackbird in its mouth. The Squirrel was attacked by a number of Blackbirds, who were greatly excited, but it paid no attention to their demonstrations and scampered off into the wood with his prey. Of their quarrels with Robins and other birds much might be written. Those who wish to investigate their remarkable habits will do well to read the acute and elaborate observations of Mr. Lyndes Jones, in a recent Bulletin of Oberlin College. He has studied for several seasons the remarkable Bronze Grackle roost on the college campus at that place, where thousands of these birds congregate from year to year, and, though more or less offensive to some of the inhabitants, add considerably to the attractiveness of the university town.

THE RING-NECKED PHEASANT.

WE are fortunate in being able to present our readers with a genuine specimen of the Ring-Necked species of this remarkable family of birds, as the Ring-Neck has been crossed with the Mongolian to such an extent, especially in many parts of the United States, that they are practically the same bird now. They are gradually taking the place of Prairie Chickens, which are becoming extinct. The hen will hatch but once each year, and then in the late spring. She will hatch a covey of from eighteen to twenty-two young birds from each setting. The bird likes a more open country than the quail, and nests only in the open fields, although it will spend much time roaming through timberland. Their disposition is much like that of the quail, and at the first sign of danger they will rush into hiding. They are handy and swift flyers and runners. In the western states they will take the place of the Prairie Chicken, and in Ohio will succeed the Quail and common Pheasant.

While they are hardy birds, it is said that the raising of Mongolian-English Ring-Necked Pheasants is no easy task. The hens do not make regular nests, but lay their eggs on the ground of the coops, where they are picked up and placed in a patent box, which turns the eggs over daily. After the breeding season the male birds are turned into large parks until February.

The experiment which is now being made in Ohio—if it can be properly so termed, thousands of birds having been liberated and begun to increase—has excited wide-spread interest. A few years ago the Ohio Fish and Game Commission, after hearing of the great success of Judge Denny, of Portland, Oregon, in rearing these birds in that

state, decided it would be time and money well spent if they should devote their attention and an "appropriation" to breeding and rearing these attractive game birds. And the citizens of that state are taking proper measures to see that they are protected. Recently more than two thousand Pheasants were shipped to various counties of the state, where the natural conditions are favorable, and where the commission has the assurance that the public will organize for the purpose of protecting the Pheasants. A law has been enacted forbidding the killing of the birds until November 15, 1900. Two hundred pairs liberated last year increased to over two thousand. When not molested the increase is rapid. If the same degree of success is met with between now and 1900, with the strict enforcement of the game laws, Ohio will be well stocked with Pheasants in a few years. They will prove a great benefit to the farmers, and will more than recompense them for the little grain they may take from the fields in destroying bugs and insects that are now agents of destruction to the growing crops.

The first birds were secured by Mr. E. H. Shorb, of Van Wert, Ohio, from Mr. Verner De Guise, of Rahway, N. J. A pair of Mongolian Pheasants, and a pair of English Ring-Necks were secured from the Wyandache Club, Smithtown, L. I. These birds were crossed, thus, producing the English Ring-Neck Mongolian Pheasants, which are larger and better birds, and by introducing the old English Ring-Neck blood, a bird was produced that does not wander, as the thoroughbred Mongolian Pheasant does.

Such of our readers as appreciate the beauty and quality of this superb specimen will no doubt wish to have it framed for the embellishment of the dining room.



From col. Chl. Acad. Sciences,

RING-NECKED PHEASANT.
 $\frac{1}{2}$ Life-size.

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BIRD MISCELLANY.

Knowledge never learned of schools
Of the wild bee's morning chase,
Of the wild-flowers' time and place,
Flight of fowl and habitude
Of the tenants of the wood ;
How the tortoise bears his shell ;
How the woodchuck digs his cell
And the ground-mole makes his well ;
How the robin feeds her young ;
How the oriole's nest is hung.

—WHITTIER.

Consider the marvellous life of a bird and the manner of its whole existence. . . . Consider the powers of that little mind of which the inner light flashes from the round bright eye ; the skill in building its home, in finding its food, in protecting its mate, in serving its offspring, in preserving its own existence, surrounded as it is on all sides by the most rapacious enemies. . . .

When left alone it is such a lovely little life—cradled among the hawthorn buds, searching for aphidæ amongst apple blossoms, drinking dew from the cup of a lily ; awake when the gray light breaks in the east, throned on the topmost branch of a tree, swinging with it in the sunshine, flying from it through the air ; then the friendly quarrel with a neighbor over a worm or berry ; the joy of bearing grass-seed to his mate where she sits low down amongst the docks and daisies ; the triumph of singing the praise of sunshine or of moonlight ; the merry, busy, useful days ; the peaceful sleep, steeped in the scent of the closed flower, with head under one wing and the leaves forming a green roof above.

—OUIDA.

THE YELLOW-BREASTED CHAT.

I am often heard, but seldom seen. If I were a little boy or a little girl, grown people would me I tell should be seen and not heard. That's the difference between you and a bird like me, you see.

It would repay you to make my acquaintance. I am such a jolly bird. Sometimes I get all the dogs in my neighborhood howling by whistling just like their masters. Another time I mew like a cat, then again I give some soft sweet notes different from those of any bird you ever heard.

In the spring, when my mate and I begin housekeeping, I do some very funny things, like the clown in a circus. I feel so happy that I go up a tree branch by branch, by short flights and jumps, till I get to the very top. Then I launch myself in the air, as a boy dives when he goes swimming, and you would laugh to see me flirting my tail, and dangling my legs, coming down into the thicket by odd jerks and motions.

It really is so funny that I burst out laughing myself, saying, *chatter-chatter, chat-chat-chat-chat!* I change my tune sometimes, and it sounds like *who who*, and *tea-boy*.

You must be cautious though, if you want to see me go through

my performance. Even when I am doing those funny things in the air I have an eye out for my enemies. Should I see you I would hide myself in the bushes and as long as you were in sight I would be angry and say *chut, chut!* as cross as could be.

Have I any other name?

Yes, I am called the Yellow Mockingbird. But that name belongs to another. His picture was in the June number of *BIRDS*, so you know something about him. They say I imitate other birds as he does. But I do more than that. I can throw my voice in one place, while I am in another.

It is a great trick, and I get lots of sport out of it.

Do you know what that trick is called? If not ask your papa. It is such a long word I am afraid to use it.

About my nest?

Oh, yes, I am coming to that. I arrive in this country about May 1, and leave for the south in the winter. My nest is nothing to boast of; rather big, made of leaves, bark, and dead twigs, and lined with fine grasses and fibrous roots. My mate lays eggs, white in color, and our little ones are, like their papa, very handsome.



From col. F. M. Woodruff.

CHICAGO COLORTYPE CO.

YELLOW-BREASTED CHAT.
 $\frac{1}{2}$ Life-size.

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THE YELLOW-BREASTED CHAT.

A COMMON name for this bird, the largest of the warblers, is the Yellow Mockingbird. It is found in the eastern United States, north to the Connecticut Valley and Great Lakes; west to the border of the Great Plains; and in winter in eastern Mexico and Guatemala. It frequents the borders of thickets, briar patches, or wherever there is a low, dense growth of bushes—the thornier and more impenetrable the better.

"After an acquaintance of many years," says Frank M. Chapman, "I frankly confess that the character of the Yellow-Crested Chat is a mystery to me. While listening to his strange medley and watching his peculiar actions, we are certainly justified in calling him eccentric, but that there is a method in his madness no one who studies him can doubt."

By many observers this bird is dubbed clown or harlequin, so peculiar are his antics or somersaults in the air; and by others "mischief maker," because of his ventriloquistic and imitating powers, and the variety of his notes. In the latter direction he is surpassed only by the Mockingbird.

The mewing of a cat, the barking of a dog, and the whistling sound produced by a Duck's wings when flying, though much louder, are common imitations with him. The last can be perfectly imitated by a good whistler, bringing the bird instantly to the spot, where he will dodge in and out among the bushes, uttering, if the whistling be repeated, a deep toned emphatic *tac*, or hollow, resonant *meow*.

In the mating season he is the noisiest bird in the woods. At this time he may be observed in his wonderful aerial evolutions, dangling his legs and flirting his tail, singing vocifer-

ously the while—a sweet song different from all his jests and jeers—and descending by odd jerks to the thicket. After a few weeks he abandons these clown-like maneuvers and becomes a shy, suspicious haunter of the depths of the thicket, contenting himself in taunting, teasing, and misleading, by his variety of calls, any bird, beast, or human creature within hearing.

All these notes are uttered with vehemence, and with such strange and various modulations as to appear near or distant, in the manner of a ventriloquist. In mild weather, during moonlight nights, his notes are heard regularly, as though the performer were disputing with the echoes of his own voice.

"Perhaps I ought to be ashamed to confess it," says Mr. Bradford Torrey, after a visit to the Senate and House of Representatives at Washington, "but after all, the congressman in feathers interested me most. I thought indeed, that the *Chat* might well enough have been elected to the lower house. His volubility and waggish manners would have made him quite at home in that assembly, while his orange colored waistcoat would have given him an agreeable conspicuity. But, to be sure, he would have needed to learn the use of tobacco."

The nest of the Chat is built in a thicket, usually in a thorny bush or thick vine five feet above the ground. It is bulky, composed exteriorly of dry leaves, strips of loose grape vine bark, and similar materials, and lined with fine grasses and fibrous roots. The eggs are three to five in number, glossy white, thickly spotted with various shades of rich, reddish brown and lilac; some specimens however have a greenish tinge, and others a pale pink.

SUMMARY.

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MOUNTAIN BLUEBIRD.—*Sialia arctica*.
Other names: "Rocky Mountain" and "Arctic Bluebird."

RANGE—Rocky Mountain region, north to Great Slave Lake, south to Mexico, west to the higher mountain ranges along the Pacific.

NEST—Placed in deserted Woodpecker holes, natural cavities of trees, nooks and corners of barns and outhouses; composed of dry grass.

EGGS—Commonly five, of pale, plain greenish blue.

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ENGLISH SPARROW.—*Passer domesticus*.
Other names: "European Sparrow," "House Sparrow."

RANGE—Southern Europe. Introduced into and naturalized in North America, Australia, and other countries.

NEST—Of straw and refuse generally, in holes, boxes, trees, any place that will afford protection.

EGGS—Five to seven.

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ALLEN'S HUMMING BIRD.—*Selasphorus alleni*.

RANGE—Pacific coast, north to British Columbia, east to southern Arizona.

NEST—Plant down, covered with lichens.

EGGS—Two, white.

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GREEN-WINGED TEAL.—*Anas carolinensis*.

RANGE—North America, migrating south to Honduras and Cuba.

NEST—On the ground, in a thick growth of grass.

EGGS—Five to eight, greenish-buff, usually oval.

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BLACK GROUSE.—*Tetrao tetrix*. Other name: "Black Cock."

RANGE—Southern Europe and the British Islands.

NEST—Carelessly made, of grasses and stout herbage, on the ground.

EGGS—Six to ten, of yellowish gray, with spots of light brown.

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AMERICAN FLAMINGO.—*Phoenicopterus ruber*.

RANGE—Atlantic coasts of sub-tropical and tropical America; Florida Keys.

NEST—Mass of earth, sticks, and other material scooped up to the height of several feet and hollow at the top.

EGGS—One or two, elongate-ovate in shape, with thick shell, roughened with a white flakey substance, but bluish when this is scraped off.

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VERDIN.—*Auriparus flaviceps*. Other name: "Yellow-headed Bush Tit."

RANGE—Northern regions of Mexico and contiguous portions of the United States, from southern Texas to Arizona and Lower California.

NEST—Globular, the outside being one mass of thorny twigs and stems interwoven, and lined with feathers.

EGGS—Three to six, of a bluish or greenish white color, speckled with reddish brown.

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BRONZED GRACKLE.—*Quiscalus quiscula ceneus*.

RANGE—Eastern North America from the Alleghanies and New England north to Hudson Bay, west to the Rocky Mountains.

NEST—In sycamore trees and oak woodlands a coarse bulky structure of grasses, knotty roots, mixed with mud, lined with horse hair or wool.

EGGS—Four to six, of a light greenish or smoky-blue, with lines, dots, blotches and scrawls on the surface.

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RING-NECKED PHEASANT.—*Phasianus torquatus*.

RANGE—Throughout China; have been introduced into England and the United States.

NEST—On the ground under bushes.

EGGS—Vary, from thirteen to twenty.

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YELLOW-BREASTED CHAT.—*Icteria virens*.

RANGE—Eastern United States to the Great Plains, north to Ontario and southern New England; south in winter through eastern Mexico to Northern Central America.

NEST—In briar thickets from two to five feet up, of withered leaves, dry grasses, strips of bark, lined with finer grasses.

EGGS—Three or four, white, with a glossy surface.

